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No. 1218

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CONTENTS

PAGE

INTERNATIONAL ECONOMIC RELATIONS

CEMA Credit System Discussed
(V.V. Stepanov, N.V. Blinkov; DEN'GI I KREDIT, Aug 79).. 1

MANPOWER: LABOR, EDUCATION, DEMOGRAPHY

Training, Deployment of Specialists in Georgia
(G. Taktakishvili; ZARYA VOSTOKA, 28 Sep 79)..... 11

Workers To Receive Old-Age Pensions While Employed
(EKONOMICHESKAYA GAZETA, Nov 79)..... 16

Factors Influencing Labor Efficiency
(N. Rogovskiy; PLANOVOYE KHOZYAYSTVO, Oct 79)..... 21

Formation, Utilization of Manpower Resources
(A. Milovidov; PLANOVOYE KHOZYAYSTVO, Oct 79)..... 32

VAZ System Applied To Enterprises in Various Regions of Belorussia
(E. Afitov; PROMYSHLENNOST' BELORUSSII, Jun 79)..... 41

Providing Incentives for Higher Quality Output
(EKONOMICHESKAYA GAZETA, Nov 79)..... 48

TRANSPORTATION

Rail Freight Operations Still Face Problems
(N. Kovalev; TRUD, 5 Aug 79)..... 51

Fifteen Different Shipping Firms Handle Maritime Navigation
(Matti Pensala; HELSINGIN SANOMAT, 7 Oct 79)..... 54

CONTENTS (Continued) Page

Improved Hydraulic Dredge Used in Turkmenistan
(R. Pavlov; TURKMENSKAYA ISKRA, 9 Oct 79)..... 59

Statistical Analysis of Seaport Operation
(A. Matuznyy; EKONOMIKA SOVETSKOY UKRAINY, Jul 79)..... 60

Civil Aviation Contributes to Economic Growth
(EKONOMICHESKAYA GAZETA, Nov 79)..... 70

Briefs
Mountain Airport 78
Soviet-Cuban Port Work 78
New Railroad Bridge 78
New Mooring Line 78
Ship-Raising Pontoon 78
New Dock 79
Ship Engines 79
New Latvian River Ship 79
Italian Built Gas Carrier 80
New Merchant Ship 80
New Fishing Trawler 80
Railway Construction 80
Far East Railway Electrification 80

INTERNATIONAL ECONOMIC RELATIONS

CEMA CREDIT SYSTEM DISCUSSED

Moscow DEN'GI I KREDIT in Russian No 8, Aug 79 pp 15-19

[Article by V. V. Stepanov and N. V. Blinkov: "An Important Link in the Socialist Credit System"]

[Text] This year the Council for Economic Assistance is celebrating the 30th anniversary of its work.

During the past 30 years the collective efforts of the CEMA member countries have created and put into practice a new type of international economic relations which is based on the principles of socialist internationalism, respect for state sovereignty, independence and national interests, noninterference in internal affairs, and complete equality, mutual advantage, and comradely mutual assistance.

Having begun with cooperation in the field of foreign trade and with an exchange of experience and scientific and technical achievements, the CEMA countries gradually moved to a deeper and more comprehensive mutual cooperation in economic and scientific and technical development.

Under the leadership of their communist and workers' parties the CEMA countries have achieved outstanding successes in social and economic development during this brief historical period. Today the commonwealth of socialist countries is the most dynamic economic force in the world. The economies and science and technology of the CEMA countries are developing at rapid and stable rates, their international authority is growing stronger, their mutual integration relations are becoming deeper and broader, and the amount of their social production is increasing and, on this basis, the welfare of their workers is growing.

Compared to 1950, in 1978 the national income of the CEMA countries increased by 7.6 times and industrial production increased by 12 times.

In their economic development rates the CEMA countries have achieved a stable superiority over the capitalist states. The amount of industrial

production of these countries is more than twice that of the countries of the European economic community and 1.5 times that of the United States.

Speaking at an election meeting of the voters of the Bauman election district of Moscow, the General Secretary of the CC CPSU and Chairman of the Presidium of the USSR Supreme Soviet Comrade L. I. Brezhnev said: "We are devoting paramount attention to our relations with the fraternal countries. They are becoming increasingly deep and many-sided....The role of CEMA has become markedly more important in the field of economic relations. It has become an important instrument for accomplishing the national economic tasks of the socialist countries."

The mutual cooperation of the CEMA countries which is promoting a strengthening of the economic might of these countries is finding a vivid expression in the development and deepening of socialist economic integration.

The 23rd special session of the CEMA which took place in Moscow in April 1969 defined the principle long-term directions of cooperation which will be put at the basis of the Overall Program for a Further Deepening and Improvement of Cooperation and for the Development of the Socialist Integration of the CEMA Member Countries which was adopted in July 1971 at the 25th CEMA Session. The adoption of the Overall Program was an important stage in expanding the mutually advantageous economic relations of the CEMA countries. The Overall Program defined a wide range of measures on developing the cooperation of these countries which are connected with solving the most important economic problems, including supplying the economies with fuel and raw materials and equipment and also satisfying the needs of populations for consumer goods.

The further development of the economic cooperation of the CEMA countries and a deepening of international socialist division of labor demanded not only the mobilization of the forces and resources of each CEMA country, but also a planned unification and joint use of their material and financial resources.

The objective necessity arose for bringing the credit mechanism into correspondence with the scope and character of the tasks facing the socialist commonwealth and for increasing the role of international socialist credit in order for it to more actively promote the realization of mutual economic cooperation and the performance by the CEMA countries of important integration measures. It became necessary to create an international credit insitution in the field of long-term and medium-term investment credit in the interests both of the individual CEMA countries and of the entire socialist commonwealth as a whole.

The agreement on the formation of the International Investment Bank was signed on behalf of the governments of the People's Republic of Bulgaria, the Hungarian People's Republic, the GDR, the Mongolian People's Republic, the Polish People's Republic, the USSR, and the Czechoslovakian Socialist Republic on 10 July 1970. Subsequently the Socialist Republic of Romania (January 1971), the Republic of Cuba (January 1974), and the Socialist Republic of Vietnam (May 1977) joined in the agreement on the formation of the IIB and became members of the bank.

In April 1974 an Agreement was signed on the basic principles of cooperation between the International Investment Bank and the government of the Socialist Federated Republic of Yugoslavia in accordance with which the bank and the government of the Republic of Yugoslavia carried out cooperation in the field of credit and financial relations, including in the realization of measures stipulated by the Overall Program with respect to which there is a mutual interest between the CEMA countries and the Socialist Federated Republic of Yugoslavia.

Thus, for the first time in the practice of the economic cooperation of the socialist countries an international center has been created to provide credit for the development of investments. Before this the CEMA countries provided each other with the necessary assistance in building enterprises and other objects only on a bilateral basis.

The basic task of the bank is to provide long-term and medium-term credit, first of all, for the realization of measures connected with the international socialist division of labor, with production specialization and cooperation, expenditures for an expansion of the raw materials and fuel base in joint interests, the construction of objects in other branches of the economy which are of mutual interest for the development of the economies of the bank's member countries, and also for construction of objects for the development of the national economies and for other purposes established by the bank's council and corresponding to the tasks of the bank. In addition, the bank's work has to be organically connected with the system of measures to further develop socialist economic cooperation and to gradually bring closer and equalize the levels of economic development of the CEMA member countries.

With the creation of the IIB the sphere of application of the collective currency of the CEMA countries (the transferable ruble) became wider. Whereas before the formation of the International Investment Bank the transferable ruble was used in credit relations only to provide short-term credit for commodity turnover, it has now also begun to function as an instrument of medium-term and long-term credit for capital investments.

The International Investment Bank began its operations on 1 January 1971 and from the very beginning concentrated its chief attention on providing

credit for important integration objects and on supplying monies for new construction and for the reconstruction and expansion of operating enterprises in whose output the CEMA member countries were interested.

The International Investment Bank has now turned into a major international credit institution which occupies an important place in the system of currency and credit relations of the CEMA countries.

The IIB has its own resources for carrying out its work. At the present time its charter capital consists of 10,713,000,000 transferable rubles of which 70 percent is formed in transferable rubles and 30 percent in convertible currencies. The contributions (quotas) of the IIB countries to the charter capital are established on the basis of the amount of their exports in mutual commodity turnover. At the present time the IIB member countries have in fact contributed 3,740,000,000 transferable rubles to the charter capital.

During the period of its work the International Investment Bank has accepted for credit in the CEMA member countries and in the Socialist Federated Republic of Yugoslavia 63 objects with an estimated value of more than 8 billion transferable rubles. In order to finance the construction and reconstruction of these objects the bank granted credit amounting to more than 3 billion transferable rubles.

The extension of credit to the countries is distributed as follows:

Table I

1. (млн. переводных рублей)

2. Страны	3. Количество кредитуемых объектов	4. Сумма предоставленного кредита	5. Количество объектов, введенных в действие
6. НРБ	11	500,0	7
7. ВНР	9	546,2	3
8. ГДР	4	516,7	2
9. МНР	1	5,5	1
10. ПНР	18	625,5	11
11. СРР	15	294,6	13
12. СССР	2	158,0	—
13. ЧССР	1	445,0	—
14. СФРЮ	1	4,5	—
Газопровод 15. „Союз"	1	16. Распределено по странам	1
17. Итого	63	3096,0	38

[Key on following page]

Key:

1. Millions of transferable rubles
2. Countries
3. Number of credited objects
4. Amount of credit
5. Number of objects put into operation
6. People's Republic of Bulgaria
7. Hungarian People's Republic
8. GDR
9. Mongolian People's Republic
10. Polish People's Republic
11. Socialist Republic of Romania
12. USSR
13. Czechoslovakian Socialist Republic
14. Socialist Federated Republic of Yugoslavia
15. "Soyuz" Gas Pipeline
16. Distributed by countries
17. Total

Credit has been extended by the IIB for the development of branches of industry which promote the international socialist division of labor and production specialization and cooperation and, above all, for the development of the fuel and energy, machine building, metallurgical, chemical, and light industries.

The objects which have been accepted by the bank for credit are at the same time of great importance for the development of the national economies of the IIB member countries. Credit is extended for the construction and reconstruction of enterprises which produce high quality output which correspond to advanced models. As examples one can cite plants for the production of trucks in the Czechoslovakian Socialist Republic, buses in the Hungarian People's Republic, pressing equipment and agricultural machinery in the GDR, railroad cars in the Socialist Republic of Romania, and high quality fabrics in the Hungarian People's Republic and Polish People's Republic. The output of some of these enterprises has been given awards at international exhibitions in Leipzig, Brno, and Poznan.

In 1978 the IIB Council permitted the extension of credit to the "TANG" Tool Plant in the Socialist Federated Republic of Yugoslavia. This is the first credit to a country which is not a member of the bank and represents a practical step toward expanding the sphere of application of the transferable ruble.

As can be seen from the above data, during eight years of work by the bank the construction, expansion, and reconstruction of 38 objects credited by it has been completed, including the commissioning of a very large integration object -- the "Soyuz" Gas Pipeline.

As a result of this, in 31 objects alone (excluding the "Soyuz" Gas Pipeline and six objects in the Socialist Republic of Romania which were restored after an earthquake with the help of IIB credit) the amount of output has increased by more than 800 million transferable rubles a year.

In 1978 the total production of the enterprises which had been built and reconstructed with the participation of IIB credit came to 2.4 billion transferable rubles. Output with a value of 1.2 transferable rubles was exported from these objects to the CEMA countries. In all, during 1972-1978 these countries received exports from the above enterprises worth more than 4 billion transferable rubles, including trucks and buses, railroad cars, presses and pressing equipment, electrical engineering products and electronic equipment, agricultural machinery, isoprene rubber, fabrics, and other goods which are in great demand in the CEMA countries.

In recent years the bank has had at the center of its attention credit for the construction of the "Soyuz" Gas Pipeline which is being built in accordance with the Coordinated Plan of multilateral integration measures of the CEMA countries for the years 1976-1980.

In 1978 the construction of this very large integration object through the joint efforts of the CEMA countries (People's Republic of Bulgaria, Hungarian People's Republic, GDR, Polish People's Republic, Socialist Republic of Romania, USSR, and Czechoslovakian Socialist Republic) was basically completed. In September 1978 the last link was laid and a symbolic "red junction" which signified the completion of the linear part of the gas pipeline was welded.

Through the collective efforts and resources of the CEMA countries the "Soyuz" Gas Pipeline which is unique in its parameters and technical solutions has been built from Orenburg to the western border of the USSR: it is 2,750 kilometers long, made of pipe with a diameter of 1420 millimeters, and has a productivity of 28 billion cubic meters of gas a year. The work which was performed by an international collective of 15,000 people ensured the beginning of the operation of the gas pipeline and the delivery of gas to the participant countries in the construction beginning with 1 January 1979 in accordance with the 21 June 1974 General Agreement. Beginning with 1980 the CEMA countries will receive 15.5 billion cubic meters of gas every year, which will greatly improve the structure of the fuel and energy balance of these countries and will help to speed up technological progress in the leading branches of their economies.

In his greetings to the participants in the construction of the "Soyuz" Gas Pipeline and the Oremburg Gas Complex the General Secretary of the CC CPSU and Chairman of the Presidium of the USSR Supreme Soviet Comrade L. I. Brezhnev noted that "this grandiose construction project has become one of the most convincing examples of the development of new forms of

cooperation by the socialist countries in solving key economic problems on an equal and mutually advantageous basis."

The realization of the multilateral credit agreements connected with the construction of the gas pipeline which were concluded between the bank and the borrowers is an example of the implementation of the points of the Overall Program on the development and improvement of the currency and credit relations of the CEMA countries.

In developing these agreements the basis which was adopted was the principles of multilateralness in relations between the IIB and borrowers and of ensuring a close interconnection between the credit and payment mechanism and the conditions of the joint participation of the countries in financing the construction of the "Soyuz" Pipeline as defined by the General Agreement on cooperation in developing the Orenburg gas condensate deposit and in constructing the Orenburg-western border of the USSR gas pipeline.

The credit and payment system which was developed on the basis of the General Agreement provides for the proportional use of credit by the participant countries in the construction of the pipeline, and also the proportional distribution of the cost to the bank of enlisting the necessary funds, which ensures these countries equal conditions in financing the object.

In view of the great importance of the "Soyuz" Gas Pipeline for the economies of the CEMA countries, a privileged interest rate in the amount of 2 percent per annum was established on the credit in transferable rubles. The credit in transferable rubles was used by the borrowers to pay for equipment from the CEMA countries, to purchase local materials, finance services supplied to each other by the organizations of the participant countries, and also to pay wages to the construction workers.

In order to provide credit for the construction of the pipeline in freely convertible currencies the IIB concluded credit agreements on a mutually advantageous basis with a number of large banks in the industrially developed capitalist countries.

In October 1977 a trip was organized for the leaders of the delegations of the bank's member countries -- representatives of the national banks -- to the construction of the "Soyuz" Pipeline. This trip made it possible for them to become acquainted with the successful course of the construction and to meet the construction workers and the leaders of the construction organizations of the GDR and the Polish People's Republic which were performing the construction of the third and fourth sectors of the gas pipeline.

The experience in organizaing credit and settlements for the gas pipeline will be used in providing credit for other large integration objects.

In 1978 the IIB accepted eight objects for credit and increased the amount of credit for two of them. The total credit extended by it came to around 100 million transferable rubles.

Credit has been extended for the overall development of the Hungarian aluminum industry, including an expansion of the light metal plant in Sekeshfekhevar and of a clay plant in Ayka, and also the development of the "Bito-II" bauxite mine. This will help to satisfy Hungary's needs for the output of the aluminum industry and to increase exports of bauxite, clay, and semi-finished aluminum goods to the bank's member countries.

The Bank's council has allowed credit for an expansion and modernization of the production of agricultural machinery at the "Agromet-Kray" Plant in Kutno and at the "Agromet" Combine in Poznan in the Polish People's Republic which will help to satisfy the needs of Poland's agriculture and to increase exports of these machines to interested IIB countries.

As a result of credit which has been granted by the bank for an expansion of the production capacities of a condenser plant in Kyustendil in the People's Republic of Bulgaria, there will be a doubling of the production and exports of low-voltage electrolyte condensers to the interested IIB countries.

The Bank's council has allowed credit for increasing the production of pressing equipment (second stage) at the "Umformtekhnik" Combine in Erfurt and for the reconstruction and expansion of the production of agricultural machinery at the plants of the "Fortshritt-Landmashinen" Combine in Neustadt in the GDR.

As a result of new capital investments involving the participation of bank credit, the volume of production at the "Umformtekhnik" Combine will increase by 16 percent; moreover, a substantial part of this output (around 60 percent) will be exported to the People's Republic of Bulgaria, the Hungarian People's Republic, the Polish People's Republic, the Socialist Republic of Romania, the USSR, and the Czechoslovakian Socialist Republic, including for such large motor vehicle enterprises as KamAZ and ZIL in the USSR, "Shkoda," and "Tatra" in the Czechoslovakian Socialist Republic, "Ikarus" in the Hungarian People's Republic, and "Dachiya" in the Socialist Republic of Romania.

The reconstruction and expansion of the production of the "Fortshritt-Landmashinen" Combine will provide for a fuller satisfaction of the needs of the IIB countries for highly productive agricultural machinery and will raise the level of agricultural production in these countries.

The use of bank credit has helped in the successful construction of a wool scouring factory with a capacity of 6,000 tons of scoured wool a year in the Mongolian People's Republic which was put into operation in January 1979. More than 60 percent of its output will be exported every year to the IIB countries.

In connection with the earthquake which occurred in March 1977, the Bank's council made a decision to extend credit for the restoration and reconstruction of certain enterprises in the Socialist Republic of Romania. At present almost all of these enterprises have been restored and are providing the necessary output for the economy of Romania.

At the end of March 1979 the 23rd meeting of the Council of the International Investment Bank took place in Moscow. The council allowed credit for the reconstruction of a Hungarian ship and crane building plant as a result of which production at this enterprise will increase by 68 percent in 1986 compared to 1977 and its exports to the IIB countries will double.

The development of the bank's credit work testifies to the successful fulfillment of the points of the Overall Program which stipulate the necessity for developing through the IIB a system of medium and long-term capital investment credit in the joint interests of the bank's member countries.

From the beginning of its work the International Investment Bank established business contacts and organized cooperation with the secretariat of the Council for Mutual Economic Assistance, the CEMA Committee on Cooperation in the Field of Planning, the CEMA Permanent Commission on Currency and Financial Questions, the CEMA Permanent Commission on Foreign Trade, and also brnach commissions and divisions.

From the first days of its work business contacts were established with the International Bank for Economic Cooperation which have constantly been expanding as the credit and other operations of the IIB have been developing.

In accordance with the Agreement which was concluded between the IIB and the International Bank for Economic Cooperation, they carry out cooperation in currency and financial matters which are of mutual interest, cooperate in the performance of credit, payment, deposit, and other banking operations in transfer ble rubles and convertible currencies, and exchange information on the development prospects of international currency markets and capital markets, on the work of international currency organizations, and on other questions.

The IIB is developing on the basis of equality business contacts with certain international and regional currency and financial organizations

(Asian, African, the inter-American Bank for Development) and large banks of the capitalist countries. At the present time the IIB maintains correspondent relations with approximately 300 banks in the capitalist developing countries and carrys out mutuall advantageous cooperation with many of them.

The International Investment Bank has stable developmental prospects for its credit work which is aimed at a further strengthening of the economic potentials of the CEMA countries, at the gradual coming together and equalization of the levels of their economic development, and at effecting the process of socialist economic integration.

The development and the beginning of the practical realization of long-term special purpose cooperation programs in the key branches of material production which are designed to last until 1990 is a new stage in the unification of the collective efforts of the CEMA countries for the accomplishment of the social and economic tasks facing them and for a deepening and development of socialist economic integration.

These programs represent a development and concretization of the Overall Program for a further deepening and improvement of the cooperation and for the development of the socialist economic integration of the CEMA member countries. The long-term special purpose programs are documents of great political and economic importance which define for the long term a coordinated strategy of cooperation by the CEMA countries. The realization of the special purpose programs will make it possible to concentrate the collective efforts of these countries with great effectiveness on the solution of key economic problems.

At the present time active work is taking place in the CEMA countries and in the agencies of the Council for Mutual Economic Assistance on coordinating social and economic development plans for the following five-year period and also on making up a Coordinated Plan of Multilateral Integration Measures. Representatives of the International Investment Bank are participating in the work on the long-term special purpose cooperation programs. The goal of this participation is to determine the objects whose construction could be carried out during the forthcoming five-year period with the participation of IIB credit, above all, credit in transferable rubles.

As in the past, the bank's credit will be assigned primarily for the construction and reconstruction of objects which ensure an acceleration of scientific and technological progress and also for the reequipping and modernization of existing production enterprises. An expansion of the credit work of the International Investment Bank and the further mobilization and concentration of resources in the bank for financing capital construction will help to realize the measures on developing and improving social and economic integration which are being carried out by the IIB member countries.

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TRAINING, DEPLOYMENT OF SPECIALISTS IN GEORGIA

Tbilisi ZARYA VOSTOKA in Russian 28 Sep 79 p 2

[Article by G. Taktakishvili, junior scientific staff member, Georgian SSR Gosplan Scientific-Research Institute of the Economics and Planning of the National Economy, under rubric "Cadres: Selection, Placement, Indoctrination": "Technicians With Engineers' Pay, or Thoughts on How the Republic is Planning the Training and Allocation of Cadres With a Higher and Secondary Specialized Education"]

[Text] In ordinary speech we generally impart to the term "specialist" a noticeable suggestion of respectfulness. A specialist must be a knowledgeable man, a master of his trade, a worker of high qualification. We generally apply this term to innovators in production, workers who are distinguished by high professionalism. More often, however, the word refers to a person who has acquired a VUZ or technicum education.

Under conditions when scientific-technical progress is being transformed into an immediate productive force, when the resolution of vital economic tasks depends on the competent use of technology and the constant search for new solutions, the introduction of effective scientific applications, the role and authority of specialists in all spheres of the economy is constantly rising.

In 1977 our republic's economy employed hundreds of thousands of specialists with a higher and secondary specialized education. The percentage is on par with the national average. And in terms of saturation of the economy with workers having a higher education we are considerably above the national average. In the middle of the 10th Five-Year Plan the USSR had an average of 10 specialists for every 100 workers and employees; the Georgian SSR had 14.

At first glance, the picture is a satisfactory one. It must be kept in mind, however, that the social-economic status of the specialist is determined not only by his diploma but also by how purposefully he utilizes his knowledge in practice, his qualifications, the return on his labor.

In other words, to step up the pace of economic and social development it is important not only to provide the national economy with specialist cadres but also to determine rational proportions in allocating them in terms of general educational levels, sectors and groups of specialties, and so on.

How does the picture look here? Start with the fact that in terms of saturation of the sphere of material production with specialists having a higher and secondary specialized education (and this is where they are especially needed), our republic is definitely behind the nationwide indicator. In 1977, we had 10 specialists for every 100 workers, employees, and kolkhoz members; the national average was 14.

Undoubtedly, this indicator is influenced by the sector and subsector structure, the proportion, if we may put it this way, of specialist-intensive sectors. The republic is following a systematic course of developing them. No less an influence, however, is exerted by a number of other factors. In 1977, for example, Georgian industry's need for specialists to fill vacant posts was met by 78.1 percent; in construction the figure was 83.2 percent. At the same time, the proportion of so-called practitioners was 20.1 and 16.7 percent, respectively. The situation was no better in other sectors of material production. This despite the fact that almost 4.5 percent of the total number of specialists with VUZ and technicum diplomas are assigned to posts not requiring either a higher or a secondary specialized education, or else are employed in labor specialties. Knowledge is being wasted; funds invested in cadre training are being frittered away. Let us try to get to the bottom of the reasons for this situation.

Attention is drawn especially to nomenklaturas presently in effect in the enterprises and organizations listing posts subject to being filled by certified specialists. The nomenklaturas were drawn up 10 to 15 years ago and have remained practically unrevised since that time. Naturally, requests for specialists drawn up even five years ago are clearly inconsistent with changes that have taken place now that the graduates trained on their basis have begun to come into production. It makes no sense to speak of the long run, because cadre requirements are determined on the basis of the same outmoded nomenklaturas, and Gosplan and the higher schools ignore the requests of enterprises and organizations when planning the contingent of pupils and students.

The CPSU CC and the USSR Council of Ministers decree "Improving the Planning and Strengthening the Influence of the Economic Mechanism on Raising Production Effectiveness and Work Quality" calls especially for the integrated approach to planning. Obviously, along with long-range plans of production development the enterprises and organizations should also work out long-range post nomenklaturas on the basis of which it will be possible to make the optimal calculation of specialist requirements.

In the total number of specialists employed in the republic's economy, the proportion of engineers and technicians is low. And it is the technicians that are "dragging" us below the national indicator. Throughout the country as a whole they account for 26.9 percent of all specialists; in Georgia the figure is 11.7--more than a two-fold lag. As a result, there are only 0.7 technicians for every engineer employed in the republic's national economy; the national figure is 1.6. Again, this circumstance has a negative influence on the sphere of material production itself, which employs about three-quarters of all engineers and technicians.

At one time plans called for substantially increasing the number of specialists graduating with a secondary qualification in order that there would be three or four technicians for every engineer in industry, construction, transport, and communications. Two years ago there were respectively 1.0, 0.4, 1.8, and 2.2 technicians for every engineer in these sectors. As we see, the situation is more or less satisfactory only in transport and communications, although overall the problem is not resolved there either.

The fact is that engineers' posts are set artificially high in industry and construction. Thus, there are 0.26 technician's posts for every engineer in industry, and 0.44 in construction. The purpose of this manipulation is to attract technicians into production by paying them higher engineers' salaries. It is as if it were unnecessary to use other, more acceptable forms of material and moral incentive. But efforts to find such are unsatisfactory; enterprise and trust officials prefer what they see as the easier way out. As a result, in 1977 2,345 technicians were working in engineers' posts in the republic. The ratio of engineers and technicians is negatively influenced by the slow rate of increase in the training of specialists having a secondary specialized education. From 1965 through 1976 they lagged 14.3 points behind the corresponding indicator of engineer training. At the present stage of development of productive forces, this gap can lead to serious consequences.

The fact is that the acceleration of scientific-technical progress and the increasing complexity of production are accompanied by an increase in the list of labor specialties requiring a secondary specialized education. In connection with this, the need for technicians is rising sharply. In the first two years of the current five-year plan alone the number of specialists with a secondary specialized education working in industry as laborers in accordance with the requirements of the complexity of the work being done increased by 12.6 points to more than 2,000. Consequently, maintaining the present proportions between engineer and technician training will ultimately lead to a bigger shortage of the latter.

A few words about agriculture. In recent years a great deal has been done in the republic to supply this sector with specialist cadres. As we have seen in the case of other sectors, however, specialist training alone does not resolve the problem. In our republic's agriculture there are five specialists for every 100 workers; the national average is 6.3. This indicator is substantially influenced by the fact that only a little more than one-half of all agronomists, animal technicians, veterinary technicians, and veterinary assistants employed in the national economy are working on the farms. Of the graduates of VUZ's and technicums in 1975-1977 11.1 percent began to work in posts not requiring that high an educational level. At the same time, half of all crew leaders in agriculture are practitioners. And here is another instructive fact: More than one-fifth of all agronomists, animal technicians, veterinary technicians, and veterinary assistants are working. . . in Tbilisi!

It is generally thought that low levels of social and living conditions are what block the attraction of specialists to the farms. A more thorough analysis of the state of affairs in this field, however, shows that there are other factors hindering the growth of the proportion of specialists in agriculture. A prominent factor is the low level of training. Not possessing the necessary skills and organized knowledge, graduates will not risk taking management posts by profile but prefer to get just any diploma and then to work in an urban locality in less responsible posts outside their specialty. For this reason, today in the matter of supplying agriculture with specialist cadres it is necessary to rely not just on training them but also on redeploying them from other sectors.

One vital problem that must be resolved is that of deploying and utilizing specialists from the fields of education, the arts, and culture. More and more of them are beginning to take jobs outside their profile. Industry alone employs in labor posts about 1,500 specialists of this profile; in addition, more than 5,000 of them are working as employees [sluzhayushchiye]. It is time, finally, to state frankly that people having degrees in these profiles are being trained on a scale that vastly exceeds existing requirements.

Meanwhile, the republic has an acute shortage of qualified personnel of other groups of specialties, for example cadres. This, by the way, is one reason why unsubstantiated calculations of specialist requirements and ill-considered post nomenklaturas have been drawn up in the enterprises and organizations. Obviously it is necessary to gradually change the profile of the republic's present educational institutions in accordance with changing conditions.

Very likely it will also be necessary to resort to more decisive measures and to introduce more effective incentives to settle cadre

problems in the national economy. Let us recall that payment for productive capital was introduced as a way of putting an end to negligent attitudes toward it. Qualified cadres also represent a kind of "priceless capital," as Comrade L. I. Brezhnev so aptly stated at the 25th CPSU Congress. In our opinion, the enterprises and organizations ought to bear material responsibility for their rational utilization. Especially since they bear none of the costs of training them.

It is vitally important to differentiate between wages for specialists, nonspecialists, and practitioners working in the same posts. Obviously, the level of their specialty knowledge and their potential and work quality cannot be identical. In addition, this differentiation will serve as a stimulus for people to upgrade their qualifications and utilize their education and intelligence for the intended purpose.

The recent CPSU CC and USSR Council of Ministers decree "Further Development of the Higher Schools and Raising the Quality of Specialist Training" calls for a number of specific measures to improve the training and deployment of certified specialists. In particular, it is very important to adopt the practice of assigning them one to three years before they graduate.

At the same time it is necessary to refine the question of utilizing diploma-holding specialists directly in the national economy, especially in the material production sphere. The waste of an education is a grave loss to society. And for our republic, with its substantial intellectual potential, problems of planning the training, assignment, and rational utilization of workers having a higher and secondary specialized education are of high priority.

6854
CSO: 1823

WORKERS TO RECEIVE OLD-AGE PENSIONS WHILE EMPLOYED

Moscow EKONOMICHESKAYA GAZETA in Russian No 47, Nov 79 p 22

[Article: "Pension Payment Procedure"]

[Text] In No. 43 of this weekly a list was published of the categories of workers who have the right to receive old-age pensions during the period of their work which, in accordance with Decree No. 862 of the USSR Council of Ministers, goes into effect on 1 January 1980. We are publishing a consultation by the social security administration of the USSR State Committee for Labor on the procedure for paying these pensions and for using this list with regard to the practice which has developed and to the new norms.

General Regulations

The list is applied to old-age pensioners, regardless of the conditions of the assignment of their pensions -- on a general basis or on privileged terms (including increased maximum amounts).

In determining the groups of workers who belong to the category of workers (junior service personnel), engineering and technical workers, and employees, guidance should be taken from the Standard Instruction on statistics on the number of workers and employees at enterprises, institutions, and organizations and on their wage fund (No. 10-80) which was approved by the USSR Central Statistical Administration on 19 June 1973 and also from the corresponding branch instructions on composing statistical reporting regarding the fulfillment of the labor plan; from the 29 June 1973 Instruction of the USSR Central Statistical Administration No. 4-82 on the composition by industrial enterprises and production associations (combines) of reports on the fulfillment of labor plans (for industrial enterprises); from the 13 January 1975 Instruction of the USSR Central Statistical Administration on the composition of the monthly report in accordance with Form 15-T "Sovkhoz Report on the Number of Workers and the Expenditure of the Wage Fund" (for state agricultural enterprises); from the 25 August

1977 Instruction of the Ministry of Railways on the composition of reports on the number of workers and on the wage fund of the workers of the enterprises, institutions, and organizations of railroads and subways (for the workers of railroad transport), and other instructions. These instructions are in effect on the basis of the 6 May 1977 Letter No. 10-80 of the USSR Central Statistical Administration "On Some Refinements in the Distribution of the Number of Workers and Employees by Personnel Categories When Reports on the Fulfillment on the Labor Plan are Composed."

The classification of enterprises, institutions, and organizations in a given branch of the economy is performed in accordance with the all-union classifier "Branches of the Economy" which was approved on 14 November 1975 by the USSR Central Statistical Administration and the USSR State Committee for Standards.

The list is applied regardless of the departmental subordination of the enterprise (organization, institution) in which the workers who have privileges in the payment of pensions are employed (with the exception of the institutions of Gosbank USSR and Gostrakh USSR). Thus, the workers of organizations for the construction of nonferrous and ferrous metallurgy mines of any ministry or department, and not only of the system of the USSR Ministry of Nonferrous Metallurgy or the USSR Ministry of Ferrous Metallurgy, have the right to receive their full old-age pensions regardless of their earnings.

When jobs are indicated in the list under a general designation, for example, cashier, bookkeeper, pensions are paid in the established procedure also to senior workers in these jobs (senior cashier, senior bookkeeper).

In cases when a worker has the right to receive a pension simultaneously on different grounds, the pension is paid on the ground which provides for the greatest privileges.

When the total of a pension and of earnings exceeds the established limits (300 or 150 rubles), the pension and not the earnings is decreased.

All types of wages for which insurance payments are made, except earnings for over-time work and occupational doubling up and all kinds of one-time payments, are included in the earnings which are calculated for the payment of pensions. In particular, account is taken of all bonuses provided for the by existing payment system, including bonuses paid from the material incentives fund. However, rewards paid for the overall annual work results of an enterprise are not included in total earnings.

The previous procedure for paying pensions to pensioners employed in temporary jobs within the limits of two months a year (including jobs

stipulated by the list) is maintained; that is, the pension is paid in full, regardless of the amount of earnings.

The effect of the subpoint of the list which provides for the payment of 100 percent of a pension regardless of the amount of earnings is not limited in time, while all of the other regulations in the list are in effect through 31 December 1985.

If Not Mentioned in the List

Postal clerks, communications operators, sorters of mail and printed matter, telegraph operators, kiosk operators, counter workers, cooks, and waiters are not specified in the new list, since all of them belong to the classification of workers and, regardless of their place of work, have the right to receive a full pension (within the limits of 300 rubles together with earnings).

As in the past, regardless of place of work, full pensions will be paid within these limits to all guards and watchmen, and also to respirator operators and testing instrument operators of mine rescue units. Beginning with 1 January 1980 receivers, storeroom workers, telephone operators, radio operators, and the operators of key calculators, perforation calculators, and electronic computers will obtain the right to prvileges in the payment of pensions on the terms which have been established for workers.

When these benefits are applied to foremen it should be kept in mind that full pensions are also paid to watch and shift and control foremen. Superintendents at construction, installation, or construction repair jobs enjoy this right regardless of the character of the enterprise, institution, or organization on whose staff they work.

In retail trade and public catering full pensions are paid (up to 300 rubles including earnings), except to workers (including counter workers), also to junior service personnel, cashiers, and other workers whose jobs correspond to counter workers, cooks, and waiters. Whether they work in a trade enterprise or are on the staff of an enterprise (institution, organization) of another branch of the economy is of no significance. At the same time, cashiers in retail trade enterprises who are employed not in trade but in other enterprise functions (for example, the payment of wages to workers) do not have the right to such a pension.

Counter workers and workers with corresponding jobs include: sales people, including senior and junior sales people, controllers, cashier-controllers, senior cashier-controllers, buffet workers, workers in the minor retail trade system (who sell goods under canvas, pavilions, kiosks, from stands, and others), and also workers in the delivery trade,

regardless of the designation of their jobs, chiefs of commodity sections (departments) and their deputies, store chiefs and their deputies, if they perform the duties of sales people, and controllers or cashier-controllers. The right to receive a full pension is held by the directors and chiefs of railroad car restaurants and the chiefs of public catering enterprises, if they perform the duties of cooks.

According to the all-union classifier "Branches of the Economy," pharmacies belong to retail trade. Therefore, as in accordance with the previous legislation, those workers who are employed in providing the population with pharmacy goods have the right to receive a full pension, if it, together with earnings, does not exceed 300 rubles.

In classifying the various workers of domestic services enterprises among the workers of the managerial apparatus guidance should be taken from the report on the number of workers in the managerial apparatus which is made up every year by all enterprises in accordance with a form approved by the USSR Central Statistical Administration. In deciding questions concerning the payment of pensions, workers who provide direct services to the population do not belong to the category of managerial apparatus workers (for example, cashiers).

In paying pensions to medical workers consideration is given to the job occupied by them, and not to the character of their education. If this job is a medical one, the worker's type of education -- medicine, biology, or chemistry -- is of no significance. Nor does the designation of medical worker's job play any role: doctor or department chief, nurse, medical clerk, and so forth.

Full pensions of up to 150 rubles together with earnings are paid to all categories of workers regardless of the character and place of their work, if they do not have the right to receive pensions during the period of their work on more beneficial terms. They may be employees, engineering and technical workers, and security workers.

The Right to 50 or 75 Percent of a Pension

The last point in the list establishes the group of persons who have the right during the period they are working to receive 50 percent of their assigned old-age pensions, and in the areas of the Urals, Siberia, and the Far East 75 percent of it, but not less than the minimum amount (on condition that the total amount of the pension and wages does not exceed 300 rubles).

Among the agricultural enterprises whose engineering and technical workers and specialists have the right to 50 (75) percent of their pensions are enterprises which produce agricultural output (sovkhozes, poultry factories, interfarm agricultural enterprises and organizations,

agricultural production at educational institutions and scientific research institutions, auxiliary agricultural enterprises).

Bookkeeping office workers include all workers, regardless of the designation of their jobs, who are employed in the bookkeeping offices of any enterprise, institution, or organization, including of an association, ministry, and department, and including also those bookkeeping offices which are not independent structural subdivisions.

The right to 50 (75) percent of their pensions is enjoyed by workers employed in control and auditing work in the control and auditing subdivisions of enterprises, institutions, and organizations in all branches of the economy, including the agencies of government and economic management.

With regard to workers employed in making expert appraisals of plans for the construction (reconstruction) of enterprises, buildings, and structures, in the past the privilege of receiving a pension was given only to workers who had been hired in this job by the central apparatus of a ministry (department). Beginning with 1 January 1980 the payment of 50 (75) percent of their pensions have been established for these workers who are hired by other organizations.

With regard to construction, installation, and construction repair organizations whose engineering and technical workers enjoy the privilege of receiving the pension, only organizations which directly carry out construction, installation, and construction repair work belong to this group.

All engineering and technical workers of production associations (combines), except those employed in a separate management apparatus, have the right to receive 50 (75) percent of their pensions.

Former Servicemen

Disabled veterans of the Great Patriotic War are paid their full old-age pensions (up to 300 rubles together with earnings), regardless of the place and character of their work. In addition, it is of no importance whether the disabled veteran received any kind of pension (disability or seniority) before taking up his old-age pension. This benefit is applied to all disabled persons who are equated in their pension support to disabled war veterans.

Pensioners who were servicemen or who were in the officer or enlisted corps of the agencies of the USSR Ministry of Internal Affairs (regardless of their age) have the right to receive the seniority pension which has been assigned to them on the terms established for old-age pensioners if they are employed in the appropriate jobs (for example, those stipulated by the list) and do not have the right to receive a larger pension according to the rules established for the payment of seniority pensions for servicemen.

2959
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FACTORS INFLUENCING LABOR EFFICIENCY

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 10, Oct 79 pp 38-46

/Article by N. Rogovskiy, chief of a department of USSR Gosplan: "Problems of Increasing Labor Efficiency"/

/Text/ In recent years the attention of planning and economic organs toward the problems of using the manpower resources of the country has increased considerably, first of all in connection with the fact that in the 1980's the situation with manpower resources will be sharply aggravated, especially in the central regions of the USSR. This is caused not only by the substantial reduction of the natural growth of the population of able-bodied age, but also by the limited opportunities to involve in social production those who are engaged in housework and on the subsidiary farms. As preliminary estimates show, in 1980 a balance of manpower resources can be struck without a shortage only with a substantial increase of labor productivity in the production sectors of the national economy and the more effective use of manpower in the nonproduction sphere. Here, as a rule, the entire increase of the output of products at operating enterprises and the increase of the volume of construction work and shipments by all types of transport should be achieved only by an increase in labor productivity.

General Secretary of the CPSU Central Committee and Chairman of the Presidium of the USSR Supreme Soviet L. I. Brezhnev said very clearly about the importance of the increase of labor productivity at the present stage of development of our society: "There is no other way to successfully solve the diverse economic and social problems facing the country than /the rapid increase of labor productivity.../ /in boldface/."[1] In the 1980's the solution of the indicated problem will beome especially urgent, taking into account first of all the aggravation of the problem of manpower resources. We will have to rely not upon the recruitment of additional manpower, but on the increase of labor productivity. L. I. Brezhnev recalled this once again

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1. "Materialy XXV s"yezda KPSS" /Materials of the 25th CPSU Congress/, Moscow, Politizdat, 1978, p 43.

in a speech in Baku when presenting to the people of Baku a high government award--the Order of Lenin.[2]

The main direction, which ensures a rapid growth rate of labor productivity both in the national economy as a whole and in individual sectors of physical production, is the complete mechanization and automation of production. During the years of the past five-year plans, and especially during the past 10 years, much has been done in this direction. Each year a large army of workers has been released from manual labor by means of the provision of enterprises and construction projects with technically modern machinery, devices and instruments.

At the same time an enormous amount of work is being performed on the modernization of operating production equipment, the amount of which is increasing with each year. The experience of world practice and the practice of the Soviet Union shows that the production and economic impact is achieved most rapidly precisely with the renovation of enterprises and the modernization of equipment.

The continuous process of reequipping labor is also taking place in other sectors of physical production. For example, the basic field work in agriculture has been almost completely mechanized. These processes are also being actively carried out in livestock breeding. Thus, the milking of cows is 88 percent mechanized, the supply of water to cow barns--79 percent, to pig sties--95 percent and so on.

However, in spite of the existing achievements, we are faced with the complicated problem of increasing the output of highly productive equipment, machinery, devices and instruments, in order to sharply reduce difficult and unproductive manual labor. The CPSU Central Committee and the USSR Council of Ministers, taking into account the importance of this problem, by the decree of 12 July 1979, "On the Improvement of Planning and the Intensification of the Influence of the Economic Mechanism on Production Efficiency and Work Quality," established that in the five-year plans of economic and social development the reduction of the use of manual labor and a limit on the number of workers and employees would be stipulated. The decree thereby raises to a higher level the planning of the reduction of manual labor and the efficient use of manpower resources. All the operations in this area will acquire a planned nature and good organization.

The reduction of labor inputs and the saving of time are the decisive factor of the economic development of society. The 25th CPSU Congress indicated that "in all the work on improving management the time factor should be taken into full account."[3] Therefore, it is so important to shorten the

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2. See L. I. Brezhnev, "Leninskim kursom" /By the Leninist Course/, Vol 7, Moscow, Politizdat, 1979, p 472.

3. "Materialy XXV s"yezda KPSS," p 61.

periods of the production and assimilation of highly productive equipment, which will make it possible to free a considerable number of workers from simple manual and difficult jobs. And here not only the amount of new equipment, but also the dates of the reequipment of the sectors of the national economy with it are very important. They have been dragged out intolerably in a number of sectors. For example, the number of new types of machines of high capacity, which are used in coal mining, is very small. For the present excavators and draglines with a bucket capacity of up to 8 m^3 and 7-ton dump trucks predominate at open-cut coal mines and open pits. The underground extraction of coal using mechanized units is 60 percent.

In the metallurgical industry a considerable lag is observed in the reequipment of enterprises with equipment for the obtaining of nonfurnace steel and its teeming in machines, the continuous casting of blanks, in the provision of modern rolling mills and units for trimming rolled products and pipe, in the provision of the main technological equipment with means of automation. Such cases can also be cited for other sectors of industry and construction. From this it follows that very much has to be done on the further technical equipment of labor and the utilization of the available reserves.

The role of technical progress in accelerating the growth rate of labor productivity has already been covered by us in the press.[4] Right now I would like to dwell on other questions which also directly influence the acceleration of the growth rate of labor productivity, and I would like to start first of all with the most important thing in the system of the organization of labor--its norm setting. The norm setting of labor is directly connected with technical progress and should reflect the technical and technological improvement of production. If this condition is not observed, the expenditures of material and financial resources on the development, placement into operation and assimilation of new equipment cannot be offset, the growth rate of labor productivity cannot be maintained at a sufficiently high level, a saving of living and embodied labor will not be achieved. That is why the norm setting of labor should be under the scrutiny of all production managers, from the foreman and the engineer to the director of the enterprise and the workers of the ministries.

What is the situation at present with the norm setting of labor in industry? It is impossible to answer this question unequivocally, since the situation is forming differently by sectors and individual enterprises. It is necessary to admit that in recent times the work in this area has been stepped up appreciably and has become more planned. The proportion of technically substantiated output norms for workers, whose labor is being standardized, has increased; the level of fulfillment of the norms has been standardized; intersectorial and sectorial output norms and so on have begun to be used more extensively. At the same time there are also serious shortcomings. Far from all the workers and employees engaged in industry are working

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4. See N. Rogovskiy, "Some Problems of Increasing Labor Productivity," PLANOVOYE KHOZYAYSTVO, No 8, 1978.

according to labor norms. Not all pieceworkers, even fewer workers whose wages are based on a time rate and still fewer engineering and technical personnel and employees are working according to technically substantiated output norms. The problem is to achieve a situation, in which the workers of all categories, as a rule, would work according to technically substantiated norms.

The improvement of labor in auxiliary operations merits serious attention. It is impossible to recognize as normal that, for example, at chemical industry enterprises the auxiliary workers, who constitute 60 percent of the total number of workers, fulfill the norms to a greater extent than the basic workers. A similar situation is observed at enterprises of the paper, meat, dairy and other sectors of industry.

The cited figures attest that in the indicated sectors daily attention is not being devoted to the improvement of the norm setting of labor. Only this can explain, for example, the fact that the USSR Ministry of the Food Industry in 1978 revised a meager number of the norms in effect, although a considerable number (more than 12 percent) of the pieceworkers are working according to experimental statistical norms, and the technical substantiated norms in this sector are far from the optimum norms.

The use of intersectorial and sectorial norms is of great importance for improving the norm setting of labor. This is also important for effectively combatting the turnover of manpower, which is doing considerable economic, social and moral harm to our socialist society. The introduction of intersectorial and sectorial norms creates their uniform intensity in similar jobs in different sectors of the national economy and industry, promoting the tightening up of labor discipline.

The norm setting of labor should become a planned process. This means that the enterprises should have schedules of the revision of the norms for each year, which provide for mutual obligations of the administration and the workers on the introduction of intersectorial and sectorial norms. The measures on the economy of labor inputs in an amount which is necessary to ensure the fulfillment of the approved plan on the increase of labor productivity should be reflected in these plans. Not only the administration of the enterprises, but also the ministries and departments of the USSR and the union republics need to regularly monitor the fulfillment of the plans on the norm setting of labor.

The fact that in industry a significant number of workers are not fulfilling the established output norms attracts attention. Their number is especially great in coal mining (15.6 percent), logging (15.5 percent) and several other sectors. This is explained by many factors: the sometimes unsatisfactory supply of materials and tools, the lack of preparation of the work places, the violation of professional and labor discipline, but first of all by the shortcomings in the improvement of the skills of the workers. Consequently, the improvement of the organization of not only production and labor, but also the training workers and the improvement of their skills is required.

Much is already being done in this direction. For example, in 1978 6.4 million people were trained directly on the job and more than 12 million people improved their skills, by mastering the methods of production innovators. But, as practice shows, even such, it would seem, an enormous scale of training does not yet correspond to the need for skilled personnel. In this connection the CPSU Central Committee and the USSR Council of Ministers adopted a special decree on the training and improvement of the skills of the workers of industry, construction, agriculture and other sectors, in which the ways of lending a planned nature to the work on training and retraining personnel are specified.

The extensive adoption in the work of enterprises and institutions of the scientific organization of labor, which provides a considerable share of the increase in labor productivity in the sectors of physical production and an increase of labor efficiency in the nonproduction sphere, is an important link in the improvement of the organization of labor activity. Unfortunately, this matter is often treated formally, as something secondary, and due to this the national economy is bearing a great loss, especially owing to the feeble reduction of the expenditures of manual labor. Apparently, it is necessary to achieve such a situation so that all the ministries, departments, enterprises and associations would have comprehensive plans of the introduction of the scientific organization of labor.

The control of losses of working time and the turnover of manpower is also of substantial importance for improving the organization of labor. The data of a sample survey attest that when transferring from one position to another workers lose on the average 31 working days, that is, on the average in a year 650,000-700,000 able-bodied people are not working. The reduction of these losses under the conditions, when in many industrially developed regions of the country the shortage of manpower resources is already beginning to be felt, is acquiring an extremely great importance.

The question arises: by what methods do you control the indicated negative phenomenon? You can often hear recommendations which suggest primarily administrative measures of pressure on the workers who have expressed the desire to change their place of work. Some believe that it is necessary to change the Labor Code and to establish a longer period of forewarning of the administration of an enterprises about release from work (not two weeks, but several months). Others propose when transferring to a new place of work to lower the category awarded to a worker at the previous job. Still others believe that when transferring to a new enterprise the worker should reconfirm his skill and so on. It is hardly possible to agree completely with the authors of these suggestions. First, no one can deprive the worker of the right to change his place of work. Second, the materials of the USSR Central Statistical Administration and the sample surveys of ministries and departments show that a large number of workers are released due to dissatisfaction with the job being performed and the everyday conditions, as well as for other valid reasons. Thus, it is impossible to eliminate the turnover of manpower by administrative measures alone.

In our opinion, a system of measures, which promote the reduction of losses of time when discharged from the only place of work and hired at a new place, should first of all be implemented. The registration of the hiring and dismissal from a job must be simplified, which will considerably reduce the losses of working time of a million-strong army of workers.

Its great losses are connected with the lack of regulation of the working time of state and public institutions and organizations (savings banks, preventive medical institutions, enterprises of trade, public dining, personal services and others), many of which begin and end working at the same hours as production enterprises. It is time to standardize the working hours of the institutions and enterprises which serve the population. At the same time the diversion during working time of members of the production collectives for work on the civic improvement of urban territories and the construction of cultural, general and other projects should be curtailed.

The analysis shows that the transfer of workers from one enterprise to another is often explained by the inadequately considered granting of housing. Often enterprises obtain floor space in apartment houses located a great distance from them. This has the result that the worker, after receiving a new apartment, transfers to another enterprise located near his place of residence.

Thus, the results of the study of the causes of the turnover attest to their diversity under present conditions. Along with the ones which we have already mentioned, many others are among them. It has been established, for example, that at the enterprises, where they worry about improving the working conditions (social rooms, showers, dressing rooms, recreation rooms, flowers and other decorative green plantings in the shops and others), the turnover of the regular labor force decreases sharply. The presence at enterprises of well-operated dining rooms, refreshment counters and supplementary services also plays an important role in this matter. Consequently, it is now impossible to treat the meeting of the cultural and everyday needs of the workers as something secondary. Precisely the inadequate attention to these questions creates a favorable environment for the turnover of the regular labor force.

The reduction of the turnover in many respects depends on the planned provision of enterprises and construction projects with manpower. According to the estimates of specialists, more than 20 million people annually change their place of work or sphere of employment, while the proportion of the organized redistribution of manpower resources for the present is extremely negligible. Owing to this the enterprises and construction projects are forced to staff the collectives themselves. It is hardly possible to consider this procedure normal. It is necessary to implement a set of measures on the expansion of the organized redistribution of manpower resources and the improvement of its forms--organized recruitment, resettlement and public appeal. Along with this the job placement of workers and employees through the oblast, city and rayon organs of the USSR State Committee for Labor and Social Problems must be increased in every possible way.

In recent years some work has been done in this area. Urban public job placement and information bureaus have been set up in the local organs for the utilization of manpower resources. In the RSFSR alone such bureaus are in operation in 151 cities. They inform the population about the need of enterprises and organizations for workers and employees; on the basis of the received information about vacant work places and vacancies they send them people who need employment. However, the number of citizens utilizing the services of the bureaus is comparatively small. For the RSFSR less than 30 percent of the workers and employees being hired are sent to enterprises and construction projects through the bureaus.

The hiring procedure in effect since 1971 in Ufa and Kaluga corresponds most completely to the tasks of efficiently redistributing manpower and increasing its efficiency. Citizens in need of employment are sent to the enterprises and organizations located in these cities through the public job placement and information bureaus, with the exception of those categories of workers, on whose hiring special decisions exist. This procedure, while providing for the voluntary nature of the choice by citizens of the place of work, reserves for the managers of enterprises and organizations the right to make the final decision on the question of hiring the workers and employees sent by the bureaus. During 1971-1978 439,000 people were provided with employment through the Ufa bureau and more than 190,000 through the Kaluga bureau. At the same time, the time for providing citizens with employment was reduced on the average to six days in Ufa and four days in Kaluga.

The concentration at the public job placement and information bureaus of the basic information on the availability of vacant work places and vacancies enables the population in need of employment to quickly choose the most appropriate place of work; the number of people changing occupation when changing the place of work decreased. The activity of the bureaus is contributing to the attachment of personnel at enterprises, since a job is sought for the people in need of employment in conformity with their desire, occupation and skills. Individual notification of enterprises and organizations about the need for manpower in newspapers, over the radio and on city streets is reduced. Notification is carried out centrally, through the job placement bureau. As a result, the transfers of workers from one enterprise to another have been reduced and the expenditures of enterprises and organizations on publishing advertisements have decreased considerably.

The concentration at the bureaus of the data on the need for manpower and the sources for meeting it makes it possible to elaborate and implement measures on the improvement of the utilization of manpower resources and the more complete involvement of the unemployed able-bodied population in social production. It is characteristic that in most cities, where job placement bureaus are in operation, the staffing of enterprises with workers has improved, while the number of enterprises with an above-plan number of them has decreased. But the main thing is that the provision of enterprises with manpower is becoming a planned, organized process. This improves the utilization of manpower resources, makes it possible to utilize the able-bodied

population more completely in social production and eliminates the possible disproportions between the demand for manpower and its supply.

The turnover and the losses connected with it are also a consequence of serious shortcomings in planning. There are frequent instances when in some region the number of work places is being increased constantly without allowance made for the availability of manpower resources, which creates a favorable environment for drifters. People begin to change their place of work frequently, while the managers of the enterprises strive to fill the new work places, without taking into account the interests of their neighbors. It is not by chance that due to the shortage of workers many enterprises operate on one shift, while the assimilation of their total capacity is dragged out for many years. Such a situation is intolerable. When settling the question of constructing new enterprises, the planning organs should take into account the availability of manpower resources.

Another shortcoming of planning is also creating an unhealthy situation in the utilization of manpower. At times in one city or another the level of wages of some categories of workers, who are employed in identical jobs and have equal qualifications, at different enterprises are different. This is explained first of all by the fact that at some enterprises more technically substantiated norms are in effect, at others their proportion is considerably lower. The discrepancy in supplementary payments in excess of the basic wage--with allowance made for the regional coefficients, remuneration for seniority and others--has an adverse effect. These concessionary supplementary payments do not exist at all enterprises. The USSR State Committee for Labor and Social Problems and its local organs jointly with USSR Gosplan and the local planning organs obviously must carefully study this problem and find a satisfactory solution. The maximum efforts have to be exerted to equalize the levels of pay of workers and employees by individual sectors and regions of the country, following the principle: equal pay for equal labor.

The decree of the CPSU Central Committee and the USSR Council of Ministers, "On the Improvement of Planning and the Intensification of the Influence of the Economic Mechanism on the Increase of Production Efficiency and Work Quality," which was adopted on 12 July 1979, calls for measures which are aimed at increasing the interest of labor collectives in accelerating the increase of labor productivity and reducing the turnover. In particular, it calls for:

the increase on the basis of the use of one-time standards of wages per ruble of output of the dependence of the wage of each work and the labor collectives as a whole on labor productivity and the end results of the work of production associations (enterprises);

the granting to production associations (enterprises) of the right to pay by means of the saving on the wage fund, which was obtained as against the established standard or the planned wage fund, increments to the wage rates and salaries:

to workers for the combining of occupations and the performance of the volume of work with a smaller number of workers in the amount of up to 50 percent of the wage rate (salary);

to skilled workers employed in especially responsible jobs for great occupational skill by stages (with allowance made for a continuous length of service at the enterprise) in the amount of 4.8 and 12 percent of the wage rate of the assigned category within the limits of the difference between categories;

to engineering and technical personnel, and first of all foremen, as well as to employees for high qualifications in the amount of up to 30 percent on the salary, and to designers and technologists in the amount of up to 50 percent of the salary, within the limits of up to 1 percent of the wage fund of the production association. To cancel the indicated increments if the indicators of work worsen;

the payment to workers in order to stimulate initiative on the adoption of technically substantiated norms of labor and their timely revision of a lump-sum award by means of the saving obtained as a result of the revision of the norms.

The State Committee for Labor and Social Problems is granted the right to allow ministries and departments, with the approval of the AUCCTU, to introduce at production associations (enterprises) of individual sectors of industry rates which are 20 percent higher for working according to advanced, technically substantiated norms.

Other measures, which promote the increase of labor productivity and the decrease of the turnover of personnel, are also called for. In particular, if we speak about the turnover, the commissioning of the State Committee for Labor and Social Problems to submit to USSR Gosplan proposals and estimates on the balances of manpower resources with a breakdown by territories, as well as to draw up and implement organizational measures, which are aimed at the increase of the planned nature in the distribution and redistribution of manpower, the reduction of the turnover and the attachment of personnel, is of great importance in the decree of the CPSU Central Committee and the USSR Council of Ministers.

I would like to dwell on the use of the labor of city dwellers who are attracted to agricultural jobs. The sending of workers and employees of enterprises and institutions of cities, workers' settlements, rayon centers and other centers of population to agricultural jobs, especially during the harvest, has become an everyday occurrence. Apparently, in accordance with the status of manpower resources in a number of regions of the country this is inevitable. Therefore, it is necessary to think out a system of organizational, technical and economic measures, which would increase the effectiveness of the use of workers and employees who have been attracted to agricultural jobs, especially as at present this process is, in reality, hard to control.

Often workers and employees are attracted to these jobs, with little consideration being given to the interests not only of the enterprises, institutions and educational institutions, but also of the sovkhozes and kolkhozes themselves. At times hundreds of people are sent where it is possible to do with tens, which does not yield great favorable results at the sovkhozes and kolkhozes, but does appreciable harm to the industrial enterprises and institutions, where these people in fact do not work for a considerable amount of time. At times highly skilled workers, engineers and technicians are utilized at sovkhozes and kolkhozes for manual, unskilled and low-skilled jobs. However, the overwhelming majority of them could not performed a skilled job during the harvesting or the processing of agricultural crops, since they were not taught this matter.

At the same time at the sovkhozes and kolkhozes there are those types of jobs, for the performance of which they do not have an adequate number of skilled workers (the repair of agricultural machinery, the installation and adjustment of equipment at livestock complexes and mechanized livestock farms) and in which the workers of industrial enterprises and construction organizations could help them. City dwellers could also repair the household appliances which are in used by the workers of sovkhozes and kolkhozes. This is a matter of no little importance: the inadequate capacity of personal service enterprises in rural areas, and at times the great territorial distance of villages from urban-type centers of population force the workers of sovkhozes and kolkhozes to spend much working time on the repair of refrigerators, televisions, radios, washing machines and other household machines and appliances.

It seems to us that the need arose long ago to attract workers and employees for agricultural jobs according to agreements between the enterprises and institutions, on the one hand, and the sovkhozes and kolkhozes, on the other. In other words, in this matter it is necessary to observe the principle of cost accounting, that is, so that both parties would have mutual obligations, would obtain a mutual advantage and would bear equal responsibility. Experience on the performance of agricultural jobs by enterprises and institutions according to agreements with sovkhozes and kolkhozes exists, in particular, in Bryanskaya, Kuybyshevskaya, Moscow and other oblasts. And although the agreements are not always completely fulfilled, in principle such a direction of normalizing the attraction of city dwellers to agricultural jobs merits encouragement. According to available data, at the kolkhozes, where such agreements are concluded, as well as where the enterprises and institutions giving voluntary assistance to the sovkhozez and kolkhozes have been working in agriculture for many years, the labor of the workers attracted from the cities is more efficient; they not only fulfill, but also overfulfill the established output norms.

It is desirable also to disseminate extensively the experience of attracting retirees, housewives, workers and employees during vacation to harvest jobs, which is being successfully practiced in the Baltic republics, Moldavia and the Crimea.

And, finally, far from all the statements of the workers of enterprises and ministries about the shortage of manpower are valid. On the basis of many years of observations, it can be safely said that at the majority of enterprises there are reserves of manpower, at some small ones, at others considerable ones. One of the reasons which enable enterprises to maintain excessive manpower consists in the shortcomings of planning, particularly of the wage fund. For the pay of the reserve manpower is mechanically included in the planned wage fund, which is calculated according to the base period. Moreover, given the existing method of measuring the volume of produced output, when the material expenditures are included in it, it is no great difficulty to find assets for the pay of the reserve manpower, especially if you consider that the proportion of wages in the total expenditures is for the absolute majority of enterprises (in machine building and metalworking) 10-12 percent and even less (in the food, light and a number of other sectors). Thus, a negligible overfulfillment of the plan is sufficient to provide the assets for paying the additional number of workers.

That is why it is important to convert more rapidly to the standard method of planning of the wage fund on the basis of the production volumes, which are calculated according to the standard net production. The advantages of this method consist in the fact that, first, it eliminates the influence of the used materials and components on the results of production and, second, the standards are established not for a year, but for five year, that is, they are long-term and are determined not according to the base period, but on the basis of the standard expenditures per unit of production. With this method it will become more difficult to have a reserve of manpower.

The examined questions far from exhaust the reserves for improving the utilization of the regular labor force, which are available at associations and enterprises. There are also other reserves, the realization of which does not require significant expenditures and which can provide a saving of time, which in itself is very important today.

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FORMATION, UTILIZATION OF MANPOWER RESOURCES

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 10, Oct 79 pp 54-60

/Article by A. Milovidov, an expert of USSR Gosplan: "Consideration of the Features of the Formation and Utilization of Manpower Resources in Socio-Economic Planning"/

/Text/ In the practical work of planning organs and scientific research organizations in recent years more and more room has been assigned to questions of the efficient utilization of manpower resources. Their reproduction consists of a number of successive stages: formation, distribution, redistribution and utilization, being a continuous movement in time and having distinctive territorial features. Let us dwell on the interrelationship of the main, in our opinion, stages: the formation and utilization of manpower resources.

The stage of formation, which is understood as the constant replacement of the old generations by the young generations when they cross the actual boundaries of the ability to work, precedes all the others, and its results affect all the subsequent stages.

Under the conditions of the high level of employment of the population, which our country has achieved at present, this certainty is emphasized even more sharply, since the other sources of the additional demand for manpower either are practically exhausted or are limited. Hence it follows that in the future the utilization of manpower resources will be limited by their formation, which owing to a number of widely known reasons is developing unfavorably.

Statistical data attest that the process of the formation of the manpower resources of the country will be characterized by a reduction of the growth of the population of able-bodied age.

This is explained by the fact that the number of people reaching able-bodied age will steadily decline (due to the decline of the birth rate in the 1960's, which was caused both by the consequences of the war and by a number of socio-economic conditions), while the number of those retiring due to age from the composition of the manpower resources is constantly increasing.

In addition to the quantitative characterization of manpower resources, at the stage of formation it is no less important also to take into account the qualtitative characterization, by which there is first of all understood the sex-age structure of the population of able-bodied age. However, under the conditions of the rapid development of scientific and technical progress the consideration of only natural demographic characteristics of the population is inadequate. The consequences of technical progress are having the result that in a demographically comparatively short interval of time new sectors and new industrial centers are being created, new territories are being developed; the division of labor is changing, new specialties and occupations, which require longer training from the workers, are emerging.

Thus, the qualitative characterization of the population consists in the change of a large number of socio-economic indicators, for example, the level of education and employment and so on. The study of these aspects of the formation of manpower resources is of enormous practical importance in the planning of the rational employment of the population. It is necessary to reflect the changes in the composition of manpower resources when planning organs compile the balances of manpower resources both for the country as a whole and with a breakdown by union republics and economic regions, in order to substantiate the distribution of productive forces over the territory.

However, in spite of the practical importance of such a methodological approach, we must also not forget the reverse influence, which the level of utilization of manpower resources (especially women) has on their formation. Its constant influence on the parameters of the natural movement of the population, and first of all on the level of the birth rate, should be borne in mind. The parameters of the reproduction of the population have gradually changed. Whereas the reproduction of the population of tsarist Russia was characterized by a high level of the birth rate and death rate, at present these indicators have declined respectively by 60 and 70 percent.

It is possible to identify the influence of the utilization of manpower resources on their formation only with a study of a large amount of statistical information for a relatively long period of time. In order to know what influence it has on the quantitative and qualitative parameters of the formation of manpower resources during the present period and will have in the future, it is necessary to analyze the movement of manpower resources over almost the entire period of existence of the Soviet Government. It is possible to make such an analysis by relying on the results of the censuses, and first of all on the data on the sex-age distribution of the population by sources of the means of existence starting with the 1926 census.

A peculiarity of census data, as is known, consists in the recording of events at a specific moment. In this sense the censuses are as if photographs of the socio-economic, demographic, ethnic and a number of other characteristics of the population and manpower resources. The number of "photographs" is limited by the difficulty of conducting the censuses.

As a rule, the indicators identified in accordance with the census data reflect some process which is typical of the entire population or an individual age group. For example, the indicators of the level of employment can be calculated for the entire population, for the population of able-bodied age and for a specific age group. In our opinion, the set of tools of the researchers should be supplemented by indicators which characterize certain socio-economic changes or others during the life of one average representative of a generation.

A specific feature of such indicators is the fact that the cycle of vital activity of a person is subject to quantitative definition. It is broken down into two periods: the labor period and the period of dependence. In turn, the period of dependence consists of two parts: the period prior to joining the manpower resources and the retirement period. Moreover, the period of dependence includes training with leave from work. The development of the mentioned indicators should be carried out separately for men and women.

Until now researchers have confined themselves only to defining the period of labor activity.[1] This is fully explicable owing to the importance of this period in the life of a person. To define the other periods in the life of a person, apart from the labor period, it is advisable to use the method of combining census data with the data of the mortality tables for the corresponding years.

In our opinion, the length of an individual period in the life of a person (labor, training, dependence, retirement) is determined by the level of the age group death rate, as well as the age group distribution of the population into employed people, students, dependents and retirees. For example, the length of the period of labor activity should be interpreted in much the same way as the indicator of the average life expectancy for a new born child is interpreted: how many years a person has to work given the conditions of the age group death rate and the level of the age group employment, which had formed at the moment of the census.

Let us examine in detail how the length of the different periods will fluctuate in time given the following conditions: the death rate changes, but the age group indicators of the sources of the means of existence of the population remain unchanged; the death rate is constant, but the age group indicators of the sources of the means of existence change. Thus, in the first case the length of a period of some status of a person depends on the age group death rate. The change in the total life expectancy tells on such periods as the labor period, dependence, training and so on. The period 1926-1959 (excluding the war years), when a substantial increase of the average life expectancy occurred, conforms to a greater extent to this condition.

In the latter case the length of any period depends on another period, and the total life expectancy does not change. The years 1959-1970, when the increase of the average life expectancy nearly halted (especially among men)

and the age group indicators of employment, dependence training and so on changed sharply, meet this condition.

It is a very difficult task to compare the length of the different periods of vital activity of a person over a large interval of time. The point is that when processing the materials of the 1926 census the concepts of the self-employed and nonself-employed population were used. People having an independent source of the means of existence (wages, incomes) were assigned to the self-employed population, dependents, the unemployed and servicemen was assigned to the nonself-employed population. The nonself-employed population consisted of people living at the expense of others. All children up to the age of 10 were ranked in this category.[2]

In order to compare the data of 1959-1970 with the 1926 census it is necessary to regroup them so as to distinguish the length of the independent and dependent periods (Table 1).

Table 1

Indicator	Men			Women		
	1926	1959	1970	1926	1959	1970
Average life expectancy.	42	64	65	47	72	73
Including the periods:						
independent.	31	47	48	26	42	51
dependent.	11	17	17	21	30	22
Proportion of the independent period in the life expectancy. .	74	73	74	55	58	70
Proportion of the independent population	65	63	63	53	56	63

The stable ratio of the dependent and independent periods in the total life expectancy of men attests that the decline of the age group death rate had an influence on the absolute increase of the periods. The stabilization of the age group death rate during the period 1959-1970 in practice led to the stabilization of the periods. The age group indicators of the independence of the male population during the entire period did not change and did not have an influence on its length.

The ratios for women formed differently. The increase of the proportion of the independent period occurred both on the basis of the decline of the age group death rate (especially in 1926-1959) and on the basis of the change in economic activeness (1959-1970). The unidirectional effect of these two factors had the result that at present the independent period of a woman is three years longer than for a man, while in 1926 and 1959 it was five years shorter.

Unfortunately, the further comparison of the 1926 data with the data of 1959 and 1970 is impossible due to differences in the methodology of registering the population by sources of the means of existence. Since the level of the

utilization of the labor of women has a substantial influence on the dynamics of the formation of manpower resources, in this article the changes, which occurred in the length of their vital activity, are examined in greater detail.

In contrast to the male population, among women a steady increase of the average life expectancy was observed. However, this fact plays a secondary role in the change of the length of the different periods. The structural shifts, which occurred in the distribution of the female population into those employed in the national economy, dependents, retirees and students, were of decisive importance (as they were among men).

Substantial shifts have occurred in the structure of employment of women. Having decreased on the whole for the period 1959-1970 from 49.3 to 45.3 percent, and in the private subsidiary sector from 7.8 to 1.3 percent, it increased in the public sector from 41.5 to 44.0 percent. At the same time the proportion of dependents of some people decreased--from 43.0 to 36.6 percent. The decrease of those employed and of dependents was offset by the increase of the proportion of people dependent on the state (retirees and students) from 6 to 16.7 percent and of grant-aided students from 0.7 to 1.4 percent.

The indicated ratios also determined the main trends in the change of the length of different periods among the female population (Table 2).

First of all the period of labor activity of women in the national economy decreased by 1.8 years, which occurred under the influence of two interconditional processes which are directed differently:

the increase of female employment in the public sector and their diversion from the private subsidiary sector. Thus, the number of women employed in the public sector in 11 years increased by 10 million with a simultaneous reduction by 7.5 million of the women employed in the private subsidiary sector.

Even more substantial shifts occurred in the change of the retirement period of life, which increased by more than 10 years, which is connected with the reduction of the employment of middle-aged women.

It seems, however, that it is not entirely correct to explain the increase in the retirement period of women only by this. It is necessary to link the indicated trend with the question, at the expense of what period was the increase offset? If we consider that it was offset by means of an increase in the average life expectancy and a shortening of the period of labor activity, the retirement period could have increased by only 3.6 years.

It has to be concluded that the increase of the retirement period was offset by the shortening of the period of dependence in the family. During these years a great portion of the able-bodied women, who were dependent on the

working members of the family, moved into the category of those employed in the public sector.

Table 2

Year	Average life expectancy of a woman	Periods of Life										
		Labor			Retirement			Period as grant-aided student	Dependence in family			Entire period of training
		Entire	In public sector	In private subsidiary sector	Entire	Retirement as such	Training at educational institutions		Entire	Dependence as such	Training	
1959	71.7	35.0	27.7	7.3	6.9	6.0	0.9	0.4	29.4	22.4	7.0	8.3
1970	73.5	33.2	32.2	1.0	17.0	16.5	0.5	0.9	22.4	12.4	10.0	11.4
Changes*	+1.8	-1.8	+4.5	-6.3	+10.1	+10.5	-0.4	+0.5	-7.0	-10.0	+3.0	+3.1

*Note: (+) is the increase, (-) is the decrease.

The redistribution of the length of the periods of dependence and retirement in favor of the latter attests to the increase of the economic independence of Soviet women. The lengthening of the period of training, the increase of which was greater than for men, is also conducive to this. Whereas in 1959 the period of training (with leave from work) of women was 8.3 years, by 1970 it had increased by 3.1 years and was 11.4 years. Significant structural shifts are traced in the average life expectancy of a person (Table 3).

The period of education and training is tending to increase (which attests to the constant improvement of the qualitative composition of manpower resources), which, in turn, led to the shortening of the period of labor, especially among men. The dynamics of the retirement period and dependence did not change. According to the author's estimates, the period of labor decreased from 55 percent in 1959 to 50 percent in 1970.

The practical significance of the examined indicators goes beyond the framework of the analysis of the interrelationship of the formation and utilization of manpower resources. First, these indicators can be used in preparing versions of the hypothesis of the birth rate in demographic forecasts, for which there should be established a quantitative link between the sum

of the periods of labor and training of women and the indicators of the fertility in the preforecast base beriod. The forecast of the intersectorial distribution of the population of able-bodied age with allowance made for its demographic structure, which was made at the Scientific Research Institute of Economics attached to USSR Gosplan, makes it possible to evaluate the period of labor and training of women in the future. By knowing this evaluation, it is possible to substantiate the dynamics of the indicators of fertility, since the identification of a quantitative link between the birth rate and the period of labor and training during the base period is expected. Of course, at the same time it is necessary to elaborate the indicators with a breakdown by city and village according to union republics and to compare them.

Table 3

Period of Vital Activity	For 1959				For 1970			
	Men		Women		Men		Women	
	years	percent	years	percent	years	percent	years	percent
Total.	64	100	72	100	65	100	73	100
Including:								
Education and training with leave from work .	15	24	15	21	18	28	18	25
Labor.	40	62	35	48	36	56	33	45
Retirement and dependence in the family. .	9	14	22	31	11	16	22	30

Second, there indicators should occupy a specific place with solving the problems of economic demography. At present economic-demographic tables are being prepared, which characterize the relationship between the production and consumption of the national income in various age groups, as well as over the lifetime of a person. In this connection it is necessary to establish the end of the period of education and training, the beginning and end of labor activity and the length of the retirement period.

Third, a number of indicators are suitable for application right now, in forecasting the working period of older ages. The question about how many retirees should be involved in social production, which is being discussed widely at present, is the subject of independent study from different points of view: economic, social, technical, medical and so on.

Let us examine this question from the standpoint of the age structure of the population. The figures of the tables of the average length of various periods of vital activity showed that in 1970 the period of labor for men over 60 was 3.2 years and for women over 55 2.6 years, which on the average was approximately 3 years. The data of the USSR Central Statistical Administration on the number of workers and employees, who receive an old-age pension and are continuing to work, attest that according to the status on 1 July 1976 this period had not changed.

It is assumed that in the future the effect of the factors, which increase the length of the period of labor, will be offset by the influence of the factors, which are aimed at shortening it (judging from the data of the USSR Central Statistical Administration, this was observed during 1970-1976). Only the dynamics of the "egress" beyond the limits of able-bodied age will affect the change in the number of working people of older age.

It is also possible to forecast the number of students 16 years of age and older, who are studying with leave from work. The underlying feature of the calculation should be:

the dynamics of the average length of the period of training among boys and girls who have reached the age of 16;

the change in the number of young people of student ages.

Along with the advantages of the indicators of the average length of the periods of vital activity it is necessary to note their negative aspects, which are caused by the peculiarities of registering the population by the sources of the means of existence during the censuses in 1959 and 1970. The period of labor is slightly overstated, while the retirement period is slightly understated.

The adjustment of the periods of labor in the public sector was made on the basis of the data on the number of workers, employees and kolkhoz farmers for 1960 and 1975 by the method proposed by A. E. Kotlyar, with allowance made for the correction for the level of the death rate of the population of able-bodied age.[3] This made it possible to draw conclusions about the dynamics of the average length of the periods of labor in the public sector of men and women in the RSFSR and the Uzbek SSR, that is, in republics which have differences in the type of reproduction and the levels of employment of the population.

The estimates made by the author show the great territorial differences in the length of the period of labor in the public sector, especially with a breakdown by sex. The change in the period of labor of women of the RSFSR, which in 15 years increased by 8 years and at present has reached 33 years, was the most dynamic. In the Uzbek SSR it increased by 5 years and is 25 years. These data attest that a reduction of the gap in the period of labor among women of the RSFSR and the Uzbek SSR did not occur.

To a certain extent this situation is explained by the structure of the sources of the additional demand for manpower: whereas in the RSFSR during this period the involvement in social production from the private subsidiary sector and the household was one-third of the total demand for manpower, in the Uzbek SSR a release of labor from this sphere was not observed.

In our opinion, the further improvement of the method of determining the length of the different periods in the life of a person is necessary. This work should be performed by statistical organs and those subdivisions of

them, which specialize in the elaboration of the indicators of social statistics. The regional analysis of such indicators, the advantage of which is that they eliminate the influence of the age structure, is of enormous interest from the scientific point of view. In the end the proposed method of research makes it possible to reveal the features of the influence of the utilization of manpower resources on their formation at the present stage.

FOOTNOTES

1. See: B. Markus, "Trud v sotsialisticheskom obshchestve" /Labor in the Socialist Society/, Moscow, Gospolitizdat, 1939; M. Y. Sonin, "Vosproizvodstvo rabochey sily v SSSR i balans truda" /The Reproduction of Manpower in the USSR and the Balance of Labor/, Moscow, Gosplanizdat, 1959; A. E. Kotlyar, "The Socialist System and the Length of the Period of Labor Activity," EKONOMICHESKIYE NAUKI, No 6, 1967; B. Ts. Urlanis, "Dinamika i struktura naseleneiya SSSR i SShA" /The Dynamics and Structure of the Population of the USSR and the United States/, Moscow, "Nauka", 1964.

2. The terms "self-employed" and "nonself-employed" population, in the opinion of Professor B. Ts. Urlanis, are unfortunate. He considers their replacement with "independent" and "dependent" to be necessary. We hold the same point of view. On the basis of this the vital activity of a person can be represented by an independent and a dependent period.

3. The data of the reference works "Narodnoye khozyaystvo SSSR v 1960 g." /The USSR National Economy in 1960/, Moscow, Gosstatizdat, 1961, pp 522, 639, 643; "Narodnoye khozyaystvo SSSR v 1977 g." /The USSR National Economy in 1977/, Moscow, "Statistika", pp 276, 380, 383; "Tablitsy smertnosti i sredney prodolzhitel'nosti zhizni naseleniya SSSR za 1958-1959 gg." /Tables of the Death Rate and Average Life Expectancy of the USSR Population in 1958-1959/, Moscow, Gosstatizdat, 1962, were used in the calculations.

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VAZ SYSTEM APPLIED TO ENTERPRISES IN VARIOUS REGIONS OF BELORUSSIA

Minsk PROMYSHLENNOST' BELORUSSII in Russian No 6, Jun 79 pp 49-51

[Article by E. Afitov, candidate of economic sciences: "Measure Beforehand"]

[Text] Many industrial enterprises of the republic are displaying the most lively interest in the experiment of the Volga Motor Vehicle Plant (VAZ) and its system of organization of production, labor and administration. Four of them have already introduced it: the Borisov Avtogidrousilitel' Plant imeni XXV S"yezda KPSS and the Automotive Tractor Electrical Equipment Plant imeni 50-Letiye Velikogo Oktyabrya, the Grodno Propeller Shaft Plant imeni 50-Letiye SSSR, and the main shops of the Minsk Motorbike Plant.

The results of their work show the great efficiency of the VAS system. For example, the average annual rate of increase in labor productivity at the Avtogidrousilitel' Plant amounted to 17 percent during the 3 years of operation under the new system, and the average annual growth rate of average earnings was less than 5 percent. These indicators were somewhat lower at the Minsk Motorbike Plant and the Borisov Automotive Tractor Electrical Equipment Plant. At the former, the increase in labor productivity during the 3 years amounted to 13.9 percent and at the latter (there the system has been in operation since the second quarter of 1978), during 9 months of last year it was 4.8 percent. The average earnings increased by relatively lesser amounts. It should be noted that the difference in the rates of increase in labor productivity were caused by the level of reserves which these enterprises had at their disposal at the time of their changeover to the VAZ system.

It has been proved that the introduction of the VAZ system is more effective at new enterprises. In the first place, a number of its elements can be envisioned in planning decisions (particularly the corresponding structure of production and administration); in the second place, there is practically no "psychological barrier" with which, unfortunately, one must cope when the system is being introduced under the conditions of operative production. This is confirmed by the Borisov Avtogidrousilitel' Plant, which went into operation several years ago.

Since many enterprises are preparing to change over to the VAS system, there is reason to discuss certain mistakes that have been made in this matter. The more so since far from all enterprise managers have an adequate idea of the VAZ system itself and its advantages.

The following features are typical of the VAZ practice:

-- centralization of auxiliary and functional services;

-- extensive introduction of collective forms of labor organization;

-- principally new arrangement of norm setting for labor;

-- extensive dissemination of normed assignments;

-- the introduction of a system of occupational advancement for personnel;

-- a principally new system of organization of wages.

In their totality the elements listed above comprise the essence of the VAZ practice.

In no case can one begin to prepare for a changeover to the VAZ system with the introduction of a new system of wages, as has happened at several enterprises. Incidentally, Gomel', Borisov and Bobruysk wood processing production associations have taken this path. One must take into account that the introduction of wages according to the VAZ practice without complete introduction of all other elements can discredit the system itself. The application of the practice of the Volga workers should begin with a change in the organizational structure and the system of administration. These problems were intelligently resolved, for example, at the Grodno Propeller Shaft Plant. This was also the beginning of the preparation for the changeover to the VAZ system at the Minsk Automotive Plant and the Osipovichi Cardboard and Roofing Felt Plant imein XXV S"yezda KPSS. The sequential change in the organizational structure and administration provides for centralization of auxiliary and functional services for production subdivisions and contributes to increasing the labor productivity of auxiliary and engineering and technical personnel.

The next stage of introduction is improvement of the norm setting for labor. On the whole, at enterprises of the republic that have changed over to the VAZ system, this has improved significantly. Thus at the Borisov Automotive Tractor Electrical Equipment Plant, the average percentage of fulfillment of normed assignments was 101.3 percent at the end of 1978 and at Avtogidrousilitel' -- 103.9 percent.

At the same time there have been serious blunders at these enterprises. The most typical of them is a lack of the proper concern for improving the technological substantiation for norm setting. Technological services first

limited themselves just to filling in output schedules on charts for the technological process. But at the VAZ technologists participate directly in norm setting for labor. They calculate the machine (automatic machine) time and in this area they are responsible for reducing labor-intensiveness. Not a single enterprise of the republic has introduced the practice of the VAZ of calculating the time for the performance of manual elements of operations, taking into account the efficiency of labor movements.

The introduction of the VAZ also requires a radical change in norm setting for labor in auxiliary work and clear determination of the volume of work and the issuance of substantiated normed assignments. The norms applied in auxiliary production, exactly as in basic production, should be technically substantiated. Let us note in parallel that at all enterprises that have changed over to the VAZ system the condition of norm setting for the labor of auxiliary workers has improved significantly and the proportion of technically substantiated norms has increased. But in many cases the actual number of workers still differs from the normative one.

The basis for planning and accounting for the volume of work performed by a brigade under the conditions of the application of the VAZ system is the normed assignment. In the majority of cases this problem has been skillfully resolved. But there have been cases where a formal approach has been taken to this important matter. Thus at the Grodno Propeller Shaft Plant there were cases where normed assignments were drawn up by shop planners, and not for the month, but for the day or shift. The role of the engineer in organization and norm setting was reduced to refining the applied norms and calculating bonuses. The volume of fulfillment of normed assignments was determined at the end of the month by workers of the planning division. Such a practice of issuing normed assignments contradicts their essence. In the first place, workers who are beginning to fulfill the monthly production program do not know the list of items nor the volume of work nor the labor-intensiveness nor the planned number of items. In the second place, the engineer-organizer is removed from the issuance of normed assignments. In the third place, with such an arrangement the normed assignment is inevitably adjusted to the level of its fulfillment.

The next stage is extensive application of collective forms of labor organization and the introduction of the system of occupational advancement of personnel.

All enterprises that have followed the example of the VAZ have done a large amount of work to introduce collective forms of labor organization. This work has been accompanied by improvement. New plans for working positions have been developed and the majority of them have been organized in keeping with the requirements of standard designs. For example, at the Grodno Propeller Shaft Plant, in auxiliary jobs alone there are 19 standard charts for the organization of working positions for various occupations. In keeping with the charts, 155 working positions were organized. All this had a signficant effect on increasing the labor productivity.

As for the arrangement of occupational advancement of personnel, no appreciable changes have been made in this area as compared to the previous practice. The enterprises devote a good deal of attention to improving the skills of the personnel, but they do not have the responsibility that exists at the VAZ where each worker is given a chance to advance up the ladder of occupational and skill categories.

Finally, the concluding stage of the introduction is the application of the VAZ system of payment for labor. This element is understood by all. As was already noted, certain enterprises have begun with this stage.

The system of payment for labor followed at the VAZ is neither piece rate nor time rate. It combines efficient elements of both the former and the latter. What are its advantages?

First, the VAZ system of payment for labor liberates the time norm from the function of regulating wages. There are not piece rates as such. The system of norm setting is constructed exclusively on the basis of the time norm which can fulfill the function of organizing production and labor. Second, it makes it possible to provide for more precise differentiation of wages, depending on the skills of the worker and the specific working conditions at the working position. Third, it stimulates the assimilation of the planned labor-intensiveness, collectivity and friendly mutual assistance in labor. Fourth, it provides for a closer link between wages and the final results of labor, and it precludes unjustifiably high or low wages.

The organization of wages at enterprises that have been changed over to the VAZ system basically meets the requirements from the point of view of its structure and the methodology for the establishment of various kinds of increments and bonuses. It should also be noted that the introduction of the VAZ system at enterprises of the republic (with the exception of the Borisov Automotive Tractor Electrical Equipment Plant) has coincided with their changeover to new wage rate conditions. This has facilitated the matter to a certain degree since possibilities have opened up for a certain increase in the average wages of the workers.

At the same time, increments paid for working conditions were not established in keeping with the developed methodology for the qualitative evaluation of the difficulty of the work with respect to the specific working positions as was done at the VAZ, but on the basis of consolidated characteristics in keeping with instructions from the USSR Ministry of the Automotive Industry. True, subsequently certain enterprises (Avtogidrousilitel' and the Automotive Tractor Electrical Equipment Plant) eliminated this shortcoming by developing charts of working positions according to working conditions. Incidentally, their development is an extremely difficult process and therefore it should be started ahead of time. This circumstance must be taken into account by those enterprises which are preparing to change over to the VAZ system.

Such are the mistakes made at enterprises of the republic when introducing the practice of the VAZ workers. All of them are the result of inadequate preparation. But, after all, the introduction of the Volga practice should be preceded by a large amount of work for improving the organization of production, labor and administration. However not all enterprises have done the necessary amount of it. The main reason for this situation is the inadequate level of organization of their work. Yet we must emphasize that the VAZ system is a comprehensive system of organization of production, labor and administration. Its introduction presupposes the active participation of specialists of practically all services. Nonetheless many enterprises have approached the question of staffing the commissions half-heartedly, to put it lightly. Thus at Avtogidrousilitel' the head engineer was appointed the chairman of the commission while it should have been headed by the director. At the Grodno Propellor Shaft Plant the commission did not include the head bookkeeper, and at the Minsk Motorbike Plant it did not include the head technologist or mechanical engineer. Similar mistakes in staffing the commissions were made at other enterprises.

The commissions placed the main responsibility for changing over to the VAZ system on the economic services, primarily on the divisions for labor and wages. This was wrong. In our opinion, when preparing for changing over to the VAZ system it is necessary to have a special functional agency staffed with specialists from various services who should be relieved of all other duties. This agency, being given certain rights and coordinating the activities of the services and divisions, should become an organizational and methodological center. In the shops and other subdivisions of the enterprise one should appoint workers who are responsible for organization, control and coordination of work related to the changeover to the VAZ system.

An important aspect of the preparatory work is detailed familiarization of the enterprise's collective with the essence of the VAZ practice. This was carried out, for example, at the Avtogidrousilitel'. They developed special "Instructions on the Policy for Changing the Plant Over to a System of Organization and Wages Practiced by the VAZ," drew up a schedule for studying various categories of workers, and set examination questions. The level of requirements made when evaluating the workers' knowledge was fairly high: More than 80 percent of the engineering and technical personnel failed the test. They and also newly appointed brigade leaders were given additional instruction and their recertification was repeated.

In addition to subjective mistakes in the introduction of the VAZ system, there have also been objective ones which reduce its effectiveness and, to a certain degree, impede its dissemination. For example, there were no interbranch or branch (with the exception of the automotive industry) methodological recommendations, which forced certain people to take a position of waiting and caution and, in a number of cases, made them fearful of restructuring the organization of production, labor and administration. The Scientific Research Institute of Labor has now published interbranch methodological recommendations for transferring enterprises over to the VAZ system. But in order to take specific features into account, it is necessary to accelerate the publication of branch recommendations as well.

Shortcomings in material and technical supply are also a significant impediment. While previously they were "compensated for" by piece-rate payment for labor, under the new conditions the fulfillment of the plan is threatened. The system presupposes efficient organization of material and technical supply. True, a certain amount has been done to resolve this problem (we have in mind the system in effect at the present time for awarding bonuses to management and engineering and technical personnel for the fulfullment of the plan in terms of the list of items). But this is only a half measure. The last word in solving this problem remains with the USSR Gosplan and material and technical supply agencies. Otherwise one cannot exclude the changeover of enterprises or their individual subdivisions to the piece-rate system of wages. There has already been an instance of this sad practice at the Grodno Propeller Shaft Plant.

The problem of planning the numbers of administrative and supervisory personnel (AUP) for enterprises that are changing over to the VAZ system must also be resolved. As was already said, the introduction of this practice presupposes improvement of the administrative staff and the corresponding optimization of the numbers of AUP. But as of this day enterprises that have changed over to the VAZ system are limiting their assignments to a reduction of the expenditures on the maintenance of this category of workers, which impedes the introduction of the system. We hope that the USSR Ministry of Finance will find ways of solving this problem.

One can also not fail to mention the fact that the introduction of the VAZ system, in some cases, causes a reduction in the earnings of individual highly paid workers and, initially, leads to an increase in labor turnover. In order to eliminate this phenomenon, in addition to expanding the rights of the enterprises to establish higher personnel salaries for certain categories of workers, it would be expedient, after careful preparation, to introduce the VAZ system simultaneously at all enterprises of the city (economic rayon) that are similar in terms of their organizational and technical conditions, type of industry and so forth. For example, in Borisovo the VAZ system has already been introduced at two of the largest enterprises and others are preparing to change over to it. This is convenient also because of the fact that party and soviet agencies of Borisovo, having evaluated the advantages of the VAZ system in terms of its merits, are purposively working on extensive explanation and dissemination of it.

I should like to draw attention to still another thing. It would be expedient to introduce everywhere such elements of the VAZ practice as centralization of auxiliary and functional services, improvement of norm setting for labor, dissemination of normed assignments and collective forms of labor organization, and the application of the system of occupational advancement for personnel, regardless of whether the enterprise is changing over to the VAZ system or not. All these elements can be introduced individually or all at once.

There is no doubt that the VAZ system will become extremely widespread in the future. Therefore the Belorussian SSR Ministry of Higher and Secondary Specialized Education should orient the VUZ's and tekhnikums toward the study of this system and its individual elements. One should also envision the training of engineers in the organization and norm setting of labor. It would also be expedient at one of the VUZ's or some institute for improving qualifications to create a "School for Labor Organizers" similar to the one that is in operation at the VAZ.

In a word, before cutting one must measure time and again. Careful preliminary preparation will guarantee successful introduction of the VAZ system at enterprises of the republic.

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PROVIDING INCENTIVES FOR HIGHER QUALITY OUTPUT

Moscow EKONOMICHESKAYA GAZETA in Russian No 48, Nov 79 p 8

[Letter from the USSR State Planning Committee, the USSR State Committee for Labor and Social Problems, the USSR Ministry of Finance and the All-Union Central Council of Trade Unions of 20 August 1979 on the Procedure Governing the Extra Charge on Funds to Provide Economic Incentives, for Payment of Bonuses to Employees and for Summing up the Results of Socialist Competition for Individual Enterprises and Associations That Have Restricted Opportunities for Above-Plan Output of Production of the Highest Category of Quality]

[Text] In accordance with the procedure currently functioning, the document says, the actual fulfillment of the plan in terms of the proportion of output of the highest category of quality within the total volume of production is calculated as the ratio of output of the highest category of quality actually produced to the actual total volume of products to be marketed. This provides an incentive for efforts by the enterprise to overfulfill the quotas for production of output by virtue of output, first of all, of production of the highest category of quality. At the same time, there are individual instances occurring where associations and enterprises do not have an opportunity to overfulfill the assignments for production of output of the highest category of quality owing to objective reasons, since the plan as a whole for volume of production is overfulfilled by virtue of output of the first category of quality or production that enjoys demand but which is not subject to certification. This leads to nonfulfillment of the targets in terms of the proportion of output of the highest category of quality within the total volume of production, which makes for a reduction in incentive funds and deprivation of the right to payment of bonuses for the basic results of economic activity.

In connection with inquiries that have been coming in, the USSR State Planning Committee, the USSR State Committee for Labor and Social Problems, the USSR Ministry of Finance and the All-Union Central Council of Trade Unions in agreement with the USSR Central Statistical Administration explain that in those cases where the association or enterprise overfulfills the plan in terms of total volume of production of output by virtue of output of the first category of quality that is enjoying demand or by output that is not subject to certification, and, in conjunction with this, has for objective reasons restricted

opportunities for above-plan output of production of the highest category of quality adequate for fulfillment of the planning assignment in terms of the proportion of this output in the total volume of production, ministries and departments of the USSR and the Councils of Ministers of the Union republics can, in agreement with the respective trade-union organizations, permit these associations and enterprises to compute the extra charge on the funds for providing economic incentives and implement the payment of bonuses to employees according to the procedure stipulated for associations and enterprises that have fulfilled the aforementioned quotas and by that same procedure evaluate the results of the activity of these associations and enterprises when summing up the results of socialist competition.

An indispensable condition for making such decisions is the fulfillment and overfulfillment of planning assignments for the output of production of the highest category of quality. When overfulfilling the plan by virtue of production of the second category of quality or by output subject to certification, but which has not been presented for certification, the aforementioned procedure is not applied.

The aforementioned decisions are made by ministries and departments of the USSR in agreement with the central committees of trade unions in respect to associations and enterprises that are part of the structure of Union-wide and Union-republic industrial ministries and departments, while they are made by the Councils of Ministers of Union republics in agreement with republic councils of trade unions in respect to associations and enterprises that are part of the structure of republic and non-industrial Union-republic ministries and departments of the Union republics.

The making of these decisions gives the respective associations and enterprises, upon fulfillment or overfulfillment by them of planning assignments in terms of output of production of the highest category of quality, the following rights:

not to reduce the size of funds for providing economic incentives for nonfulfillment of planning assignments in terms of the proportion of output of the highest category of quality within the total volume of production;

to implement an increase in the size of funds for incentives for overfulfillment of plans in terms of the total volume of production;

to carry out the payment of bonuses to supervisory and engineering and technical personnel and office workers for the basic results of economic activity if the fulfillment of the quota in terms of the proportion of output of the highest category of quality within the total volume of production is the basic indicator for the payment of bonuses.

Bearing in mind the fact that overfulfillment of the plan in terms of the total volume of production of output must, as a rule, be provided for by means of overfulfillment of the plan in terms of output of production of the highest category of quality, the decisions envisaged by the present letter can be made by ministries and departments of the USSR and by the Councils of Ministers of the Union republics in agreement with the respective trade-union organs only in exceptional cases.

8663
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RAIL FREIGHT OPERATIONS STILL FACE PROBLEMS

Moscow TRUD in Russian 5 Aug 79 p 1

[Article by N. Kovalev, chairman of the Central Committee of the Railroad Workers' Trade Union: "Smooth Flow for Steel Rails"]

[Text] Today Soviet railroad people observe their labor day. Usually work figures are cited, unutilized resources are revealed, and goals for the upcoming period are defined on this day.

Our railroads carry huge amounts of cargo. In 1978 freight turnover exceeded 3,429 billion ton-kilometers. This is over half of all rail shipments on our planet. About a quarter of world passenger turnover is carried out. But our trackage is only 11 percent of the world's total.

Our rail net is expanding. During the 3 years of the Five-Year Plan approximately 3,800 km of track were laid and over 9,000 km were equipped with automatic blocking and dispatcher signaling.

Today one of our primary goals is to increase the volume of freight haulage. As a result the valuable efforts of workers of the Moscow Railroad in speeding the movement of heavy and long trains are of great importance.

Trade union committees of the Moscow Railroad are taking an active part in the development and introduction of new, advanced technology. The use of trains nearly a kilometer in length, unheard of in the past, has been established so as not to impede the movement of other freight trains. On a number of sections track had to be rebuilt, speed limits changed, maintenance facilities for cars and locomotives improved, and additional work on electrification, communications and signaling performed.

The trade union committees took the completion of this work under strict public control and secured from management the establishment of the necessary conditions for workmen who revamped the railroad sections during the severe winter. Moreover, the heavy flow of trains was not curtailed on the road during this period. Since the beginning of the year 74,000 heavy and long

trains, containing more than 33.5 million tons of above-norm shipments of national economic goods, have passed over the road.

The valuable experience of the Moscow people is being introduced on other roads. The first results are in: the average weight of a train over the whole rail network has increased by 106 tons since January of this year.

But good results are being achieved only where management and trade union committees approach the introduction of new technology in a serious and businesslike manner. Unfortunately, this is not occurring everywhere. For example, the Moscow experience is not being adequately disseminated on the Gor'kiy, Kuybyshev and West Kazakhstan systems.

Also there are cases where socialist obligations are undertaken without any economic foundation. Unrealistic obligations on fuel savings and electricity conservation are especially common. Thus, it was decided to conserve 1.5 million kilowatt-hours of power in 1979 on the Southern Railroad system. After 5 months there has been a savings of 37.6 million. This is already 25 times the annual obligation figure.

Effective control over fulfillment of socialist obligations is still not being exhibited everywhere, aid is not being given to laggards, and the reasons for inefficient operations are not being analyzed. Miscalculations in setting up competition have resulted in personnel of the Donets and Far East railroad systems and Ivano-Frankovsk, Petrozavodsk and groznyz divisions not fulfilling their conditions for over two years. And out of 200 classification yards in the rail system, 70 have not complied with the plan and their obligations since the beginning of the Five-Year Plan.

We realize that there are serious shortcomings in railroad transport. Work has progressed under stressful conditions, especially in recent years. Goals for the shipment of important national economic goods from, as well as their delivery to, enterprises and construction projects are not being fully realized. This leads to major disruptions in the operations of a number of branches of the economy. Especially alarming is the lag in deliveries of coal, ore and timber. During the first half of this year the freight shipment plan was underfulfilled by almost 90 million tons, the overwhelming portion of which --over 70 million tons--came in the first quarter.

The reason for this mainly is the inadequate carrying and processing capabilities on a number of the more important lines.

Realizing the difficult situation existing on railroads, the Central Committee of the CPSU and the Soviet government manifest great concern for strengthening the living and working conditions of railroad workers. Thus a series of measures contained in the decree of the Central Committee CPSU and Council of Ministers USSR "Measures for developing railroad transport in the years 1976-1980" is being systematically implemented.

Sizable unused reserves exist at junction points of various types of transport --in the transshipment of cargo from railroad cars to ships, from warehouses

to motor vehicles, etc. More than 80 percent of all loading-unloading operations are performed on sidings and in ports. And so the efficient use of railroad cars, their maintenance, and the smooth operation of the whole transport system depend to a great extent on how this work is organized. This is why integrated socialist competition among workers in related industries based on the experience of Odessa and Leningrad transport workers and Chelyabisk enterprises is of such great importance.

At present groups from over 3,000 railroad stations, which have concluded cooperative agreements with groups from 10,000 industrial enterprises, 34 seaports, 68 river ports, and 400 motor transport organizations, are participating in the integrated competition.

At the same time there are instances of a negligent approach toward fulfillment of cooperative agreements. During last year's severe winter, train consists with frozen coal stood idle at the Cherepovets Metallurgical Plant. This "gift" was presented to the metallurgical workers by workers of the Northern Railroad System. And a cooperative agreement had even been signed between the combine and the railroad.

As in the past the number of idle railroad cars on sidings of many industrial enterprises is great. As a result railroad transport failed to deliver more than 80 million tons of cargo to consumers in 1978. Last year alone more than 47,000 cars were damaged on sidings.

Repair agreements are now being attempted between the MPS Ministry of Railways and other ministries in order to improve the status of our fleets of cars and locomotives. Unfortunately, we have not always succeeded in reaching such an agreement. For example, the Ministry of Heavy and Transport Machine Building and Ministry of Electrical Equipment Industry have turned down the proposals of the Ministry of Railways.

Organizing the unloading of freight cars is a serious problem for railroad workers. Over 20,000 cars daily are not unloaded by consignees at sidings and roughly the same number stand idle awaiting access to unloading platforms. This problem is especially acute at enterprises of the Ministry of Timber and Wood Processing Industry.

The Central Committee of the trade union will continue to give close attention to the integrated approach to solving the main problems of railroad transport. The strengthening of contacts between our road and plant committees and the inter-branch territorial trade union organizations will help in this effort. Railroad workers are determined to bring into play all forces in order to fulfill the tasks set by the 25th CPSU Congress.

6754
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FIFTEEN DIFFERENT SHIPPING FIRMS HANDLE MARITIME NAVIGATION

Helsinki HELSINGIN SANOMAT in Finnish 7 Oct 79 p 33

[Article by Matti Pensala: "Soviet Maritime Traffic Handled by Fifteen Different Shipping Firms, Trading Enterprises Also Own Ports"]

[Text] A total of 15 shipping firms is operating in the Soviet Union. They are located in various coastal cities throughout the country. These firms, which operate independently and without complete commercial arrangements, also own the drydocks and the local ports. In Finland the ports are municipal installations and the docks belong to the enterprises.

In the Soviet Union the word "sea" is attached to the wordsshipping firm to distinguish it from river and fishing fleets, which have their own firms and ministries. River traffic is large and the fishing fleet is not inconsiderable. Its gross tonnage is greater than the tonnage of the country's tanker fleet.

The organization of sea shipping activities in the Soviet Union is tri-level. The highest level is directed by the Ministry of the Maritime Fleet located in Moscow. Its three subordinate shipping firm associations coordinate the operations of shipping firms associated with them.

"The actual shipping firms are independent enterprises and are completely independent of the associations," states Deputy Minister Leonid Nidzhak of the Ministry of the Maritime Fleet. (There are several deputy ministers in each ministry and they correspond to our chief of a government office; there is only one "full" minister in each ministry.)

The Ministry of the Maritime Fleet directs the activities of the shipping firm associations and determines the future transport to be handled by them. Also the ministry deliberates the need for new tonnage and its distribution among the shipping firm associations. This concerns ships to be built domestically as well as procured abroad.

Shipping Firm Operations Are Profitable

The shipping firms themselves are located in the various Soviet republics to handle their export and import shipments as well as cargo from one Soviet

port to another, but to a lesser degree. The shipping firms of the river fleet handle the majority of domestic shipments.

According to Nidzhak the shipping firms are profitable enterprises and operate in accordance with commercial principles. The state is not responsible for their debts and they are not responsible for the state's.

The shipping firms themselves determine the number of their personnel and decide on their basic procurements within the framework of the plans presented by the ministry.

In general, in the Soviet Union enterprises may keep only a small portion of the income obtained above and beyond the production goals. According to Nidzhak the income earned by the shipping firms remains at their disposal in its entirety.

Maritime educational institutions including more than 300,000 people are in the service of the shipping industry. Of this number approximately one-third serves on ships. The remainder work in administration, on the docks, and in the ports. The ministry was not able to throw any light on the mutual division of the labor force working on land. According to it only the shipping firms themselves could answer this question.

The drydocks and ports of each shipping firm first of all serve their own ships, but the ships of other Soviet shipping firms and foreign ships may also use them. It is self-evident that they must pay for these services.

The West has accused the Soviet Union of excessively expanding its fleet naturally watching out for its own interests in the shipping markets. However, Nidzhak assures us that the development of his country's foreign trade tonnage has been stable and even slower than the growth of foreign trade. "The growth of the Soviet commercial fleet has been even twice as slow as the growth of the world's total tonnage."

The commercial fleet has been developed by diversifying its structure. In addition to conventional ships the Soviet Union has procured roro-ships, refrigerated ships, and mother ships for barges, among other things. "Normal competition determines orders, we buy ships from countries in which they are built well, quickly, and inexpensively," explains Nidzhak. Finland has also had significant success in this competition.

Needed Foreign Currency from Chartered Freight

The Soviet Union is the world's seventh largest sea-going nation. At the beginning of this year the gross tonnage of its commercial fleet was 21.2 million tons. By the beginning of July it had increased to approximately 21.8 million tons. In addition to regular commercial ships, this number also includes fishing and specialized ships and even dredgers. The Soviet Union's tonnage is nine times greater than Finland's.

The Soviet Union's fishing ship tonnage is also considerably larger than all of Finland's commercial fleet. There are 3,000 fishing vessels in the Soviet Union and their total weight amounts to 4.8 gross registered tons. All in all there are 7,111 vessels in the Soviet Union's tonnage. The number of Finnish commercial ships is 464 and amounts to 2.42 million gross registered tons.

Soviet ships primarily deal with the shipment of foreign trade. Approximately 120 million tons are imported and exported annually. The corresponding figure for Finland last year was 41.3 million tons.

The figures for Soviet domestic shipments amount to 75-80 million tons. The exploitation of natural resources in Siberia and the Soviet Far East will increase water transport within the country's borders.

Even though they concentrate on handling import and export shipments, Soviet ships also sail between the ports of third party countries in international trade for the purpose of earning foreign currency. Indeed, the Soviet Union has a constant shortage of currency.

However, such international shipments do not exceed 13 percent of import and export income. Deputy Minister Nidzhak says that this ratio will remain the same or will even decrease slightly.

"The Soviet Union Does Not Dump"

Western seafaring nations have accused the Soviet Union of forcing down freight prices. Shipping services are sold at 30 percent less than the tariffs received by other seafaring nations.

Nidzhak rejects such arguments and assures us that Soviet shipping firms are operating honestly. According to him this, however, does not apply to all Western shipping firms, which have been fined in the millions for the use of dishonest means to secure their position and profits.

According to Western sources the low wage level of Soviet seamen makes it possible to sell shipping services at a low rate. It has been calculated that the captain of a Soviet vessel earns the same amount of money as a Finnish sailor. This has caused a certain Finnish outfitter of ships to call Soviet ships flagships of convenience.

According to Deputy Minister Nidzhak the Soviet Union does not have even one flagship of convenience or any ships registered abroad.

Convenience flag tonnages in Nidzhak's opinion obscure an assessment of the commercial fleets of various countries and their ownership relationships. Nidzhak cites as an example the United States, whose national gross tonnage is approximately 22.5 million tons, but there is a full 67 million gross registered tons under American ownership sailing under flags of convenience.

According to Nidzhak an uncontrolled market situation prevails in the world's commercial shipping, for which the Soviet Union cannot be held responsible.

The supply of ships exceeds demand by approximately 120 million gross tons; and "this figure was calculated in the West," notes Nidzhak. The Deputy Minister sees speculation and orders for ships without a concrete deliberation of need as the reason for this oversupply.

The size of the Soviet fleet is, on the other hand, dictated by the needs of 260 million residents and industry. "A fifth of the world's total industrial output is produced in the Soviet Union," points out Nidzhak.

Shipping Firms Brought Together in Three Associations

Soviet shipping firms are assembled into three shipping firm associations on a geographical basis. These associations also handle some local traffic in addition to import and export shipments.

Sevzaflot or the northwest fleet is made up of six shipping firms:

The headquarters of the northern shipping firm is located in Arkhangel'sk. Its ships carry much wood, among other things, and handle local traffic.

The Murmansk Shipping Firm specializes in Arctic ships.

The headquarters of the Baltic Shipping Firm are located in Leningrad.

The Lithuanian Shipping Firm's center is in Klaypeda.

The Latvian Shipping Firm operates out of Riga.

The headquarters for the Estonian Shipping Firm are in Tallinn.

Yuzflot or the southern association is made up of five shipping firms:

The headquarters of the Danube Shipping Firm are in Izmail. This shipping firm handles traffic in, to, and from the Danube.

The Black Sea Shipping Firm is the Soviet Union's largest. Its center is in Odessa. Its tonnage is primarily composed of tankers. Another tanker firm operates in Batumi, but its ships are smaller and sail over shorter routes.

The Zhanovin Shipping Firm's center is located in Novorossiysk.

The Caspian Sea Shipping Firm is located in Baku.

Dalflot or the Far East fleet has four shipping firms:

The Far East Shipping Firm is located in Vladivostok.

The Primorsk Shipping Firm is headquartered at the port of Nakhodka.

The Sakhalin Shipping Firm is located in Kholmsk.

The Kamchatka Shipping Firm is headquartered in Petropavlovsk.

Soviet Commercial Fleet 1 January 1979
Ships weighing more than 100 gross tons (GT)

	Steamships		Motorized		Total	
Type of ship	No.	GT	No.	GT	No.	GT
Passenger	8	126,717	210	529,220	218	665,937
Freight	119	643,639	2,170	9,284,636	2,289	9,928,275
Tankers	38	1,282,932	421	3,368,814	459	4,651,746
Other	107	85,227	701	384,234	808	469,461
Fishing	77	160,250	2,862	4,514,352	2,939	4,674,602
Dredgers	19	18,958	389	332,369	408	351,327
Other	6	47,609	358	478,419	364	526,028
Total	374	2,365,332	7,111	18,892,044	7,485	21,257,376

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IMPROVED HYDRAULIC DREDGE USED IN TURKMENISTAN

Ashkhabad TURKMENSKAYA ISKRA in Russian 9 Oct 79 p 4

[Article by R. Pavlov, correspondent of TURKMENSKAYA ISKRA: "Second Birth of the Hydraulic Dredge"]

[Text] After capital repair from the boatyard of the Chardzhousk ship repair plant, the powerful hydraulic dredge AD-2 set off on its maiden voyage. Its technological features were much improved by the shipbuilder-designers of the Rostov central design/construction bureau of the USSR Ministry of the Maritime Fleet. They developed and equipped the vessel with new systems.

"Working contacts between the workers of the enterprise and the designers began long ago", said M. Sobolev who serves as head engineer of the plant, "Our first joint job was the dredger, of a catamarran type, which made a good showing in the capricious Amudar'a". The rebuilding of the hydraulic dredge is to some degree a continuation of this work. Because of the extremely deep draught, not designed for a river, the effectiveness of the AD-2 was low. According to the plan, the workers from Rostov made so-called "bilges" which raised the dredge up quite a lot. This practically guaranteed that it would operate in the most shallow portions of the river.

There was another system, which also, used at the suggestion of the ship's crew, improved the manner of excavation. With the help of special fuel service piping, the river bottom, impeding the free movement of the ship, is first scoured and is thus in a crumbled, suspended state when it reaches the shore. This method greatly increases the productivity of the hydraulic dredge.

During the repair of the AD-2 the problem of preserving the environment was successfully solved. The water used to cool the engine undergoes an additional cleaning in vacuum devices and filters.

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STATISTICAL ANALYSIS OF SEAPORT OPERATION

Kiev EKONOMIKA SOVETSKOY UKRAINY in Russian No 7, Jul 79 signed to press 16 Jul 79 pp 37-44

[Article by A. Matuznyy, candidate of economic sciences and chief of the "Transflot" Service of the Black Sea Shipping Line, Odessa: "Economic Efficiency Indicators of Seaport Operation"]

[Excerpt] USSR Gosplan has devised a unified system of indicators of the rise in economic efficiency of production.* Its virtue is that these indicators are unified for all levels of social production, and efficiency is computed on the basis of principles which are common to all economic entities. Determination of economic efficiency from an entire set of indicators, rather than just one, makes it possible to draw the necessary economic conclusions.

At the same time the system of indicators is not without shortcomings. For instance, both relative and absolute indicators are used in evaluating the efficiency of live labor. The interrelationship is not observed between summary and partial (factor) indicators of production efficiency. It is well known, for example, that all indicators of the functional performance of production resources are necessary to evaluation of production efficiency, but the sphere of application of each of them is limited to a specific field: they show the interrelationship of the results of production with its various elements. These indicators also have an inherent shortcoming in that the entire volume of work done is used in computing them, though that volume is not the result of just one factor, but of the total set of factors (for example, the productivity of live labor and efficiency of utilization of fixed and working capital). For that reason none of the indicators of utilization of specific production resources can fully characterize production when taken in isolation.

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* See "Metodicheskiye ukazaniya k razrabotke gosudarstvennykh planov razvitiya narodnogo khozyaystva SSSR" [Methodological Guidelines for Compiling State Plans of USSR Economic Development], USSR Gosplan, 1974.

Composite indicators which generalize efficiency, reflecting in summary form the utilization of various inputs and resources as well as the effect of several factors, are necessary to an overall evaluation. In future, in our opinion, we should strive for a unified indicator which reflects the level of efficiency unambiguously.

In the present article an attempt is made to determine the economic efficiency of seaport operation by means of a composite indicator in which the impact of the principal production factors is taken into account.

A large number of indicators are at present used in the practical computation of efficiency of seaport performance: efficiency of utilization of labor resources (labor productivity), of productive capital (output-capita ratio), production costs (profitability), etc. These indicators do not conform to the same set of terms, they are difficult to compare, and they do not always operate in the same direction, but even may run counter to one another: for instance, the output-capital ratio may drop as labor productivity rises, and so on. Thus a system of indicators does not guarantee that we will obtain an unambiguous summary evaluation of production efficiency.

Some authors* recommend that we regard the change of a majority of these indicators for the better as a criterion of the growth of production efficiency, and should they change for the worse, this is to be taken as evidence of its decline. This approach is not altogether satisfactory, especially when we take into account that the indicators themselves do not conform to the same set of terms and are not comparable.

The difficulties in applying a system of efficiency indicators in maritime transportation are particularly notable when we compare the operation of seaports operating under different economic conditions. In such cases an opportunity arises for subjectivism to intrude. Consequently, it would be worthwhile to have a summary indicator with which one could objectively evaluate the entire ramified economic performance of a seaport. This is not to deny the importance of partial indicators. Effective management of the economy requires a knowledge of the various aspects of economic activity and determination of the efficiency of various factors affecting production. And the use of partial indicators is an aid in selecting the correct solution in a specific production situation.

Now, a seaport's economic activity is determined by the plan, which is compiled in physical and value indicators. The port's costs and the services it renders (cargohandling) are stated in value terms. The physical indicators are more specific and stable in time than the value indicators. At the same time we should take into account that tons and ton-miles, as units of

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* See Yermolovich, L. L., "Analiz effektivnosti promyshlennogo proizvodstva" [Analysis of the Efficiency of Industrial Production], Finansy, 1976.

measurement of transportation work that is different in the object to which it is applied and in the place where it is performed, do not ensure reliable evaluation of its total volume; that is, to express the output of maritime transportation solely in tons and ton-miles is not objective enough. The search is continuing, then, for ways of improving methods of measuring the output and evaluating the performance of production subdivisions in maritime transportation. Results of a number of research projects were introduced into the practical operation of seaports when they made the transition to the new system of planning and economic incentives. Cargohandling in tons, supplemented (along with other indicators) by the plan for income, expenditures and profit, as well as by the indicators of the labor plan, remains the principal indicator used for economic description of the production performance of maritime shipping related to cargohandling in seaports.

It is an established principle that the only legitimate way of describing the fleet's operations in foreign navigation is with value indicators. This is determined by the nature of the fleet's work in foreign transport operations. The carrying of cargo in foreign navigation is by its economic nature a particular type of export operation. In this case the useful benefit to the national economy is measured above all by the amount of foreign exchange obtained. This is the reason why the volume of output in foreign navigation is measured in value terms.

Since the performance of maritime transport is expressed in value terms, indicators reflecting the volume of cargohandling and its economic evaluation should also be value indicators, since this is necesary to summarization and determination of the overall result of the operation of maritime transport.

The volume of income from all types of productive activity is the indicator that reflects most fully the results of the entire ramified operation of maritime transport in carriage, loading and unloading of cargo, and servicing the fleet. These revenues should be calculated in terms of a single accounting unit--the ruble, since they determine the principal qualitative indicators: labor productivity, the cost per unit of work done, the output-capital ratio and so on. Thus the revenues from all types of productive activity of maritime transport can be viewed as an indicator that is a summary expression of the value of the sum total of its output, and consequently would specifically include expressions of the seaport's output in value terms.

In the present procedure income is formed from revenues from cargohandling, warehouse operations in the storing of cargo, cargo-forwarding operations, the operations of service-auxiliary craft and the local fleet, port charges, canal tolls and other fees, and miscellaneous operations and services (including reduction of the standard port time of vessels used in planning, separation of cargoes, etc.). The structure of seaport income from various types of activity is shown in Table 1.

Table 1. Structure of the Income of Port Operations in 1971-1975, %

Total for port operations	100.0
Breakdown:	
Cargohandling	57.4
Warehouse operations related to cargo storage	11.5
Forwarding	0.1
Operations of service-auxiliary vessels and the local fleet	19.3
Port and other charges	8.6
Miscellaneous operations and services	3.1

The figures in Table 1 show that cargo-handling operations are the principal sources of income in seaport operation.

When the seaports made the transition to the new system of planning and economic incentives, profit became the most important indicators of the economic performance of transportation, the indicator of its qualitative aspect. Profit is one of the principal economic categories of socialist production, since socialism develops on the basis of expanded reproduction. The surplus product is its source.

The profit of a socialist enterprise comes about as the difference between revenues from the sale of products or rendering of services and the production cost to produce or perform them. Its magnitude is an inverse function of the magnitude of cost. The lower the relative costs, the greater is the profit, other things being equal. Its size depends on the unit production cost of the product, the volume of production and the level of wholesale prices (level of shipping rates for the fleet, agreed rates for cargo-handling operations), and rates for services and operations. The greater the difference between the wholesale price (rates) and the production cost (services) the enterprise achieves by improving the technology and the organization of work, the better will be its financial indicators, while the closer the production cost comes to the price (the rate), the worse these indicators will be. This is the basis of profit's role as a means of enhancing the economic motivation of the enterprise to improve its production. The desire to augment profit motivates enterprises to reduce production costs, to improve technology and the organization of work and to raise the quality of production activity. Profit, then, is among the important qualitative indicators of the efficiency of economic performance.

At the same time, the absolute amount of profit cannot fully describe an enterprise's operating efficiency; this requires establishing the ratio of profit to production cost or to the fixed and working capital employed in the enterprise. Indicators of profitability are computed for this purpose.

Two types of profitability are assigned to maritime transport enterprises in the plan: total profitability and adjusted (raschetnaya) profitability. Total profitability is defined as the ratio of balance-sheet profit to the average annual value of fixed productive capital and normed working capital

within the limits of the allowance. Adjusted profitability is the ratio of balance-sheet profit, minus the sum of the charge on capital, fixed payments and interest on bank credit, to the average annual value of fixed productive capital and normed working capital minus the value of capital furnished on preferential payment terms.*

The composite nature of the indicator of the profitability of production, which synthesizes the effect of numerous factors, enhances its significance and allows it to be put among the most important qualitative indicators of production performance. We will examine the dynamic behavior of the profitability indicator for the ports of the basin in the 1971-1975 period.

Table 2. Total Profitability of Seaports, %

Name of Port	1971	1972	1973	1974	1975
Odessa	11.59	8.78	12.59	9.31	16.38
Il'ichevsk	10.63	10.05	11.73	12.96	16.12
Nikolayev	18.43	21.28	22.19	16.45	16.05
Kherson	32.53	33.12	37.20	29.27	27.16
Belgorod-Dnestrovskiy	6.75	2.64	2.79	2.78	7.50
Skadovsk	9.22	8.48	12.47	15.97	20.51
Sevastopol'	10.76	9.57	9.85	13.11	18.86
Yevpatoriya	16.57	9.55	9.38	7.97	11.20
Yalta	7.27	8.35	7.69	7.11	2.90
Feodosiya	28.54	19.35	25.05	24.16	13.86
Novorossiysk	15.04	14.38	17.11	15.96	13.85
Tuapse	14.08	13.48	15.62	12.52	8.06
Sochi	2.24	2.32	1.18	2.13	3.00
Batumi	20.69	24.51	26.36	21.59	19.13
Poti	7.50	8.76	10.77	8.90	12.63
Sukhumi	0.44	1.70	--	2.05	0.89
Zhdanov	16.20	17.34	22.05	22.04	17.43
Kerch'	13.89	15.65	17.17	10.74	10.26
Berdyansk	20.81	20.77	27.30	26.67	9.83
Taganrog	21.21	26.31	20.50	27.71	8.30

An analysis of the figures in Table 2 shows that the profitability indicator is not stable either from port to port or from year to year.

In the final analysis the profitability indicator describes the efficiency of utilization of various resources in production, but it does not accurately reflect production efficiency in all respects, since it does not depend entirely on a given enterprise's activity. For that reason financial profitability cannot in and of itself be a criterion for evaluating the results and quality of performance of enterprises (seaports).

* See Cherkesov-Tsybisov, A. A., "Ekonomicheskiy analiz v sisteme upravleniya predpriyatiyami morskogo transporta" [Economic Analysis in the System of Managing Maritime Shipping Enterprises], Moscow, Reklambyuro MMF, 1973.

In order to judge the efficiency of operation in maritime shipping we must establish those factors which are components in profitability, that is, bring into the analysis other partial and summary indicators of the enterprise's operation. The basic meaning of the term "production efficiency," then, should be the level of utilization of production factors to augment the volume of transportation output.

We have already noted that gross income and profit are indicators that do not take into account all the results of the activity of seaports, but only a portion of them, and as a consequence these indicators would appear to be incomplete. To determine economic efficiency we need not only the gross income, but the entire social product, including that portion of it which goes to reimburse the means of consumption used up. Both live and embodied labor, which determines the productivity of live labor, share in production of the product. The greater the share of embodied labor, the higher the ratio of capital to live labor, the higher as a rule is its productivity. Accordingly the indicator of all work done, including inputs of both live and embodied labor, is more suitable as a performance indicator for determination of production efficiency.

In speaking specifically of transportation as a production process, then its efficiency (E) will be expressed by the following ratio:*

E = Quantity and quality of work done/Inputs of embodied and live labor to perform the work in question

If the summary indicator of the efficiency of port operation is to fully suit its purpose, the numerator and denominator must be quantities of the same kind, making it possible to compare and evaluate both the results obtained and the production capabilities of seaports. The total results in the numerator must be compared to the total costs incurred in its performance in the denominator. There must accordingly be a close functional relationship between the numerator and denominator.

The system of partial indicators now used to evaluate the efficiency of seaport operation is based, as we have already said, on consideration of the efficiency of utilization of current production inputs, labor resources and productive capital. In a summary indicator the partial indicators indicated above must be unified on a common basis, that is, synthesized. This means that they must be quantitatively commensurable, they must be put in a comparable form, and each production factor must be assigned a specific economic valuation.

All outlays for productive capital necessary to the normal functioning of production must be taken into account for proper determination of the inputs

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* See Petukhov, R. M., Lazutkin, Ye. S., "Ekonomicheskaya effektivnost' i organizatsiya proizvodstva" [Economic Efficiency and the Organization of Production], Moscow, Ekonomika, 1972.

required to obtain the total result. They include fixed and working capital and also funds for remuneration of the labor force.

The question of measuring labor expenditures is the most complicated problem. Some authors propose that labor resources be converted to a money equivalent, but neither the use of elasticity coefficients of production functions for this purpose, nor recording costs of reproducing labor resources has theoretical justification.

In practice the acceptable method of determining costs related to the use of live labor in the production sphere is, in our opinion, the use of data on wages and also on certain other payments to workers employed in material production.

In so doing we should bear in mind that the wage fund is dual in nature: on the one hand it can be regarded as one of the elements of production costs, while on the other it can be viewed as a most important factor determining the level of the people's well-being. From this standpoint the wage is rather a partial indicator of the results, a portion of the income obtained by the workers, rather than a cost.

On this basis full expenditures of the live labor of workers in material production should be included in total costs. In a calculation of economic efficiency they can be expressed in value terms and designated as V. In seaports V can take the form of primary worker income, including the following: the wage fund, supplements for replacing absent workers, for combining occupations, remuneration of work on holidays, at night and overtime, payment for lecturing, per diems for official trips, the value of special clothing, special footwear, etc., issued, and also social security contributions.

To that we need to add the sum total of accumulations formed from the profit P by increasing the charges amounting to V in order to arrive at the full cost (V + P) in all stages of the product's production, specifically in the performance of cargo-handling operations.

Consequently, profit and wages, taken together, make up the enterprise's net output, which reflects the volume of value newly created right within the port. In this case the net output figures as an important performance indicator of the port's activity, since it takes into account the full magnitude of expenditures of live labor to perform cargo-handling operations in value terms.

Moreover, in using the summary indicator to express the economic efficiency of a seaport's performance we must state more precisely what we mean by the inputs of various types of resources used in production.

If by resources of fixed and working capital used over a given period we mean their average amounts available to the specific economic entity at any

one time, then the total value of the subjects of labor expended over the given period should be taken as the volume of consumption.

The wear on fixed assets is a natural measure of the volume of consumption of fixed capital. Applied to economic entities, it is wise to take into account the sum total of depreciation.

By contrast with the indicator of profitability, in determining efficiency we must take into account the value of the wear on fixed assets (the amount of value passing over into the products), taking the sum total of depreciation charged for berths, materials-handling machines, warehouses and other fixed productive assets of the port. As a result we obtain a quantity which corresponds to the value of the final product (cargo transshipment performed)--the conventional net output (V + P) plus depreciation (A):

$$V + P + A. \quad (1)$$

And, as we have already emphasized, the results obtained should be applied not only to current costs, but also to costs for assets in operation that were built over the entire previous period, since it is well known that real production costs are not limited exclusively to the sum of expenditures of live labor and depreciation. Moreover, one of the important steps necessary to computing the indicator of economic efficiency is to include in it the standards of the efficiency of capital investments used in project and economic planning, and therefore one-time outlays should be converted to annual terms by taking percentages of fixed and working capital in current use in accordance with standard efficiency (e) of 0.12.*

Then the efficiency of seaport operation--expressed as the relation of the benefit to the costs--can be calculated from this formula:

$$E = (V + P)/(V + P + A + eF), \quad (2)$$

in which e--standard efficiency (0.12); F--capital advanced:

$$F = F_{fixed} + F_{working}, \quad (3)$$

in which F_{fixed}--fixed capital; $F_{working}$--working capital.

We thus propose an expression that determines economic efficiency of seaports as a function of the following indicators: V--remuneration of labor (primary worker income), P--profit, A--depreciation, E--standard rate of efficiency, F--capital advanced.

Indicators of the economic efficiency of the operation of ports, computed according to our formula, are given in Table 3.

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* See Khachaturov, T. S., "On Criteria and Indicators of the Efficiency of Social Production," KOMMUNIST, No 7, 1975.

Table 3. Economic Efficiency of the Operation of Seaports in the 1971-1975 Period

Name of Port	1971	1972	1973	1974	1975
Odessa	0.57	0.52	0.56	0.51	0.59
Il'ichevsk	0.56	0.55	0.57	0.58	0.60
Nikolayev	0.64	0.67	0.68	0.62	0.61
Kherson	0.74	0.74	0.76	0.73	0.70
Belgorod-Dnestrovskiy	0.56	0.47	0.47	0.41	0.50
Skadovsk	0.63	0.61	0.65	0.68	0.68
Sevastopol'	0.61	0.61	0.61	0.64	0.69
Yevpatoriya	0.64	0.57	0.55	0.53	0.57
Yalta	0.49	0.51	0.49	0.48	0.40
Feodosiya	0.72	0.66	0.69	0.69	0.61
Novorossiysk	0.58	0.58	0.59	0.58	0.55
Tuapse	0.54	0.52	0.53	0.49	0.41
Sochi	0.39	0.38	0.37	0.37	0.38
Batumi	0.64	0.67	0.67	0.63	0.58
Poti	0.41	0.44	0.47	0.43	0.45
Sukhumi	0.58	0.59	0.55	0.57	0.59
Zhdanov	0.63	0.62	0.66	0.65	0.60
Kerch'	0.59	0.60	0.61	0.59	0.52
Berdyansk	0.68	0.67	0.69	0.68	0.56
Taganrog	0.71	0.73	0.68	0.72	0.58

An analysis of Table 3 shows that the indicator of operating efficiency of the seaports in the basin varies from year to year. It is not difficult to ascertain the reason for these fluctuations by investigating the quantities V, P, F and A.

For example, for the port of Odessa the value of the efficiency indicator (E) was highest in 1975 and lowest in 1974.

Results of a comparison of the values of V, P, F and A for these years are given in Table 4.

Table 4

In thousands of rubles

Port of Odessa	Σ	V	P	A	F	E
1974	148,740	10,974	11,233	5,891	120,642	0.51
In %	100.0	7.37	7.56	3.96	81.11	--
1975	152,826	11,586	18,972	6,424	115,844	0.59
In %	100.0	7.58	12.41	4.20	75.80	--
Index number						
In %	--	105.57	168.89	109.04	96.02	115.68

It follows from Table 4 that remuneration of labor increased 5.57 percent between 1974 and 1975, while profit increased 68.98 percent, while at the same time the value of productive capital decreased 3.98 percent. A similar parttern of rising efficiency of port operation is also revealed when we determine the relative share of each quantity considered (V, P, A, F) in their total sum (Σ) by years (1974 and 1975). For instance, the relative share of remuneration of labor increased only 0.21 percent between 1974 and 1975, while the relative share of profit increased 4.85 percent and the relative share of the value of productive capital decreased 5.3 percent in that period. Consequently, the change in these quantities made it possible to considerably improve the efficiency indicator of the port's operation in 1 year.

Thus the analytical expression obtained (2) corresponds to the logic of economic analysis, and it can be viewed as a methodological basis for determining the economic efficiency of seaport operation.

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CIVIL AVIATION CONTRIBUTES TO ECONOMIC GROWTH

Moscow EKONOMICHESKAYA GAZETA in Russian No 47 , Nov 79 pp 1, 2

[Article: "Air Transport"]

[Text] Air transportation has developed further in the years of the 10th Five-Year Plan along with all other industries of the national economy. It is making a significant contribution toward the over-all development of the productive forces of the country, toward the strengthening of its economic potential, and toward the meeting of social goals. Aeroflot never before handled such a substantial volume of work as it is currently doing. It has moved 372 million passengers and more than 10 million tons of urgent national economic freight and mail in three years and nine months.

The total length of the domestic and international lines of Aeroflot now exceeds 900,000 kilometers. More than 3,600 cities and population points of the country are linked with a single system of air service.

The structure of passenger flights has substantially changed in the 10th Five-Year Plan. The basic growth in the volume of work was achieved owing to an increase in the number of long-distance routes and routes to remote regions where the advantages of air transport are most perceptible.

Technical re-equipping of civil aviation is being carried out in accordance with the decisions of the 25th Congress of the CPSU. Currently, more than 60 percent of the total volume of shipments are being carried out on Il-62, Tu-154, and Tu-134 airplanes. But the renovation of the air fleet represents only part of the modern technical progress of Aeroflot. Air transport is a successfully functioning integrated mechanism thanks to the coordinated and balanced development of all of its links (the airplane and helicopter fleet, runways, airport complexes, navigational equipment, and the emplaning and management of air traffic). Significant steps forward in the quality of the work of ground service employees are being taken in terms of the organization and management of production.

New complexes for automated systems of management are being created. Work is being conducted on the automation of traffic control as well as take-off and landing, which will significantly increase the traffic capacity of airports and will make flights safer and more regular. Electronic computer equipment is being more widely used for passenger service. Civil aviation is receiving the newest navigational technical equipment, which is raising the regularity of air traffic, and which is guaranteeing the reliable management of flights under any weather conditions and at any time of the day.

Technical achievements in the construction of airplanes have brought with them significant changes in the equipping of ground services. Dozens of large airports, modern terminal buildings, and hotels have been built. A great deal of construction work has been carried out at the airports of Mineral Waters, Petropavlovsk-Kamchatskiy, Rostov-on-the-Don, Kuybyshev, Kazan', Pevek, Shushenskoe, Ust'-Kut, and elsewhere. Now they can accept the newest types of airplanes. Modern terminal buildings and hotels have been built at the airports of Orenburg, Murmansk, Komsomol'sk-on-the-Amur, and Vladivostok. Dozens of objects have been turned over for air traffic control operations. The Olympic cities of Moscow, Leningrad, Tallin, Kiev, and Minsh have renovated their air harbors. A new terminal complex is being built at the Sheremet'evo Moscow Airport. It will have a traffic capacity of 6 million people per year.

Attaching particular importance to the servicing of the regions of Siberia and the Far East, the Ministry of Civil Aviation has developed general long-range schemes for the development of its Krasnoyarsk and Tyumen' administrations for 1981-1990. Similar long-range programs will be drawn up for the Magadansk, Far Eastern, Yakutsk, and Western Siberian administrations of civil aviation.

A fundamental amount of the aviation services for the industries of the national economy in the fourth year of the five-year plan was carried out in the territory of Siberia and the Far East -- almost half of the total flying hours. Aviation rendered a large amount of assistance in 1979 to the builders of our country's largest petroleum and gas complex in Tyumenskaya Oblast. Approximately 90 Mi-6 and Mi-8 helicopters worked every day on the installation of the Surgu -- Polotsk gas line. Despite the complex weather and climatic conditions during the laying of the Baykal -- Amur Railway Trunk Line, aviation workers completely carried out the demands of the builders of the BAM. Flights were made to the remotest sections of the trunk line. Equipment, tools, various materials, food products, mail, and much more were delivered by air. Regular flights were organized to basic points on the construction site.

Quotas for the fourth year of the five-year plan were met ahead of schedule for the utilization of aviation in the national economy. The state plan for nine months of the fourth year of the five-year plan was carried out by civil aviation workers for all the basic and the majority of calculated production and financial indicators.

Aeroflot air lines have moved 80.9 million passengers and 2.2 million tons of urgent national economic freight and mail. Passenger turnover has grown by 8.5 percent, and the total volume of shipments by 7.3 percent, in comparison with the same period last year.

Air transport now occupies second place (after railways) in over-all passenger turnover. On the average, every third resident of our country now uses the services of civil aviation.

Guaranteeing the accelerated delivery of passengers, Aeroflot is actively contributing to the raising of the effectiveness of public production. Time saved by passengers owing to aviation comes to more than a half million person-days in the 10th Five-Year Plan.

The high national economic effectiveness of Aeroflot also lies in the fact that, by assuming a significant segment of passenger travel, air transport creates the possibility for the railways to reduce the number of passenger trains and to increase freight traffic and freight turnover. It has been calculated that the fulfillment by civil aviation of a billion passenger-kilometers is equivalent to the dispatching of 1,000 passenger trains. The freeing of these trains permits an increase in the carrying capacity of railroads and, owing to this, an additional dispatching of 2,000 freight trains and the movement of 4.5 million tons of freight.

With Maximal Efficiency

The level of Aeroflot's commercial load for nine months of 1979 was 83.4 percent in comparison with 81.9 percent for the same period last year. The basis for the raising of the effectiveness of the production activity of civil aviation and the successful realization of the tasks of the 10th Five-Year Plan is the maximal expansion of the utilization of the trunk line airplanes, the Il-62 and the Tu-154. Total flying time on these machines is increasing by a factor of 3.4 in comparison with 1975.

The airplane-airbus, Il-86, is being used for lines of medium distance. It is designed to carry 350 passengers. It will cruise on the busiest routes which run to our country's resorts from Moscow, Leningrad, and Kiev and will help the organizers of Olympiad-80. After leaving his baggage on the "lower deck" in the cargo compartment, the Il-86 passenger will go up to the second floor where, after settling himself comfortably in the spacious salon, he will be able to listen to music or watch a movie during the flight.

A maximum of comfort also awaits passengers of the new airplane, Yak-42. Designed to carry 120 people at a speed of 850 kilometers per hour, it will be used on neighboring trunk lines. The micro-airbus, An-28, is being tested. It will carry 15 passengers.

Total volume of air transport shipments (billions of ton-kilometers)

Shipments of freight on air transport (millions of tons)

Air transport passenger turnover (billions of passenger-kilometers)

The new transport airplane, the Il-76, has come into use on the routes. The freight salon of this giant allows for the shipment of assembled motor vehicles and buses, every kind of equipment, and large-scale machinery units with an over-all weight of up to 40 tons. A refrigerator is provided in the salon for when the airplane is loaded with vegetables, fruits, or other food products.

Questions of raising the effectiveness of the utilization of the air fleet and material and technical resources and the struggle to improve quality indicators have come to occupy a large place in the activity of the enterprises of civil aviation. Particular attention in 1979 is being given to the zealous expenditure of fuel and energy resources and, in particular, to the strictest conservation of aviation fuel and lubricating materials.

A complete program for the reduction of expenditures for fuel for the basic fleet of civil airplanes was adopted by joint decisions of the ministries of civil aviation and the aviation industry. Work is being conducted to rectify air routes, to choose the most economical flight schedules for air ships, and to utilize the most profitable flight altitudes, taking into account the transition to a new system of aircraft separation in the air.

Within aviation collectives, a movement has developed for the reduction of the proportionate expenditure of fuel and fuel and lubricating materials. Competition has become widespread on the basis of individual and collective personal accounts of conservation.

The movement, started on the initiative of leading Moscow workers, for the carrying out of the quotas of the five-year plan by the 110th anniversary of the birth of V. I. Lenin is a clear manifestation of the tireless creative search of workers of the industry. Workers of the capital airports, Vnukovo, Domodedovo, Sheremet'evo, Bykovo, and the aviation workers of Novgorod, Belgorod, and Orel are the first to join this movement.

The initiative, "For Model Air Service from the Booking Office to the Salon of the Airplane," was widely practiced in the 10th Five-Year Plan. More than 80 percent of the crews of aviation transport supported the initiative of the aviation workers of the Domodedovo production association, "For Every Trip, the Highest Productivity and an Excellent Fulfillment of the Flight According to the Norms of Flight Ratings." The collectives of the Leningrad and Odessa aviation enterprises are the first in civil aviation to have taken up the practice of railway, water transport, and motor vehicle workers regarding the conclusion of contracts among collectives of various means of transportation for socialist competition.

Contracts of labor collaboration with collectives of the aviation industry were concluded by 37 Aeroflot enterprises. The Vnukovo aviation enterprise and the Kuybyshev aviation plant took the lead in this. The useful experience of mutual collaboration has been accumulated in the collectives of agricultural aviation, kolkhozes, and sovkhozes.

A plan of measures for the generalization and introduction of advanced know-how operates within the system of the Ministry of Civil Aviation. Work is being conducted for the selection and evaluation of leading experience and initiatives which have industrial significance for the raising of the effectiveness and quality of work, the guaranteeing of the safety of flights, and the raising of the level of services on air transport.

For a High Quality of Service

In 1979, 53 new aviation lines were opened. Among them are Moscow -- Noril'sk -- Pevek, Murmansk -- Leningrad -- Mineral Waters, Pavlodar -- Ural'sk -- Kiev, and Frunze -- Kuybyshev -- Odessa. In 1980, it is planned that approximately 50 new aviation lines will be opened, including Petropavlovsk-Kamchatskiy -- Novosibirsk -- Mineral Waters on Il-62 airplanes and Khabarovsk -- Irkutsk -- Rostov and Ufa -- Omsk -- Irkutsk -- Khabarovsk on Tu-154 airplanes. Moreover, Mineral Waters will have a guaranteed link with Yakutsk, Chita, and Noril'sk on Tu-154 airplanes.

Semiautomatic systems for ticket registration and baggage checking are being installed with the aim of raising the level of service for passengers. "Sinar" or "Avia" information systems have been installed in all the large airports. The organization of the sale of return tickets has been further developed, especially for inhabitants of Siberia, the Far East, and the Far North for flights from Moscow, Leningrad, Kiev, and the resort zones of the country. In 1979, 90,000 places have been provided for this from Moscow alone, as opposed to 52,000 in 1978.

In the course of 1979, enterprises of civil aviation have been provided with automatic systems for the control of air traffic. Such systems appeared in the airports of Mineral Waters and Rostov-on-the-Don and are expected to be installed in Kiev and Sochi by the end of the year.

Airports have continued to be supplied with the means to guarantee the take-off and landing of airplanes under lowered ceilings by means of radio illumination equipment, and airplane crews have been trained for flights in these conditions. However, it should be noted that, despite the measures being taken, delayed trips still occur due to human error on the part of the workers of civil aviation. The causes of the delays include the late loading and unloading of baggage and on-board food products, the late seating of passengers on the airplane, the incorrect registration of the route, and, most important, the insufficient organization of the technological operational process. There are still many passenger complaints about interruptions in air traffic, shortcomings in the organization of the sale of tickets and seat reservations, poor information, and the inattentive attitude of flight service workers. The regularity of flights is interrupted in such administrations of civil aviation as Tyumen', Yakutsk, Northern Caucasus, and the Central Rayons.

Not everything in this regard depends just on Aeroflot. Often aviation enterprises experience a shortage of ground equipment, certain mechanisms, spare parts, and instruments which are supplied by ministries of the aviation and radio industries and other departments.

The construction of new and expansion of exisiting airports is lagging in a number of places, as well as work on other objects of civil aviation. For example, the Main Administration of the Building Materials and Structural Parts Industry of the Executive Committee of the Moscow City Soviet of Workers' Deputies is behind schedule on the installation and the putting into operation of a terminal building at the Vnukovo Airport and a passenger service complex in Moscow. Likewise, work of a Ministry of Transportation Construction organization is lagging at the Tashkent airport, as well as the work of the USSR Ministry of Construction of Heavy Industry Establishments at the Khabarovsk airport.

Multipurpose Designation

Aeroflot carries out for the national economy transportation-communication; construction and installation; and forest patrol flights. It conducts aerial surveys, services scientific expeditions, and provides escorts for vessels, emergency first aid, and aviation and chemical work in agricultural and timber operations. Prospecting for useful minerals is carried out with the aid of specially equipped airplanes and helicopters. The charting of a locality, land management, and the planning and construction of railroads and highways, gas and petroleum pipelines and hydroelectric power stations is now unthinkable without aviation.

The utilization of aviation helps to raise productivity and contributes to the raising of the quality of agricultural products. The treatment of fields from the air eliminates more than 1,000 tractors and more than 1,500 operators for every million hectares.

Civil aviation is utilized in the timber industry on a grandiose scale. Aircraft regularly patrols 800 million hectares of forest. A special place belongs to aviation in the rendering of emergency first aid. Every year airplanes and helicopters make approximately 70,000 medical flights and transport more than 230,000 patients and medical workers and more than 1,000 tons of medical freight.

The use of helicopters in construction and installation work is acquiring great importance in recent years. The specialized Mi-10K carried out numerous operations which are unique in their complexity. Among these are the installation of spark preventers during the repair of the cupola furnaces of a smelting shop, the installation and dismantling of the metal structures of the lifting gears on the smoke stacks of a state regional electric power plant, the installation of the supports for electric transmission lines, the renovation of a television tower, and others. These projects were carried out in short intervals of time without production stoppages at the enterprises.

Unfortunately, there are still no specialists who are responsible for the organization of air shipments and the calculation of the work of aviation equipment in many of the organizations of the USSR Minneftegazstroy [expansion unknown], the Ministry of the Gas Industry, the Ministry of Transportation Construction, and the Ministry of Energy which lease helicopters and airplanes. The utilization of aviation in the technological cycle of the work of these organizations is far from planned. Proper training for the rational utilization of aviation equipment is not conducted.

Aviation enterprises do not always carry out their contractual obligations to their clients with high quality and in a timely fashion. There are interruptions in the apportioning of aviation equipment and delays and cancellations of planned flights. The elimination of these deficiencies represents an important potential for the raising of the effectiveness of the industry.

Currently in civil aviation, as in other industries, particular attention is being given to the further improvement of planning and the intensification of the influence of the operational mechanism on the raising of the effectiveness of production and the quality of work. It is important to guarantee the rational utilization of everything that Aeroflot posses, to rely, mainly, upon the intensive factor of the growth of the volume of shipments and other types of aviation work for the service of the national economy, and to more widely introduce scientific and technical achievements and advanced experience into production.

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CSO: 1823

BRIEFS

MOUNTAIN AIRPORT--On the eve of our national holiday a Yak-40 passenger airplane performed a run from Dushanbe to Murgab -- the rayon center of Gornyy Badakhshan. Here, at an altitude of more than 3500 meters, the country's highest altitude airport has been set up. In the past it was only possible to get to Murgab on a truck or by helicopter. The new takeoff and landing strip makes it possible to receive modern airliners. This has greatly reduced travel time for passengers. [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 7 Nov 1979 p 1] 2959

SOVIET-CUBAN PORT WORK--Odessa. The bad weather threatened to spoil the established schedule for processing the "Yuriy Gagarin" diesel ship in the port of Havanna. But this did not happen. Moreover, it was possible to win nine days. A socialist competition agreement between the Soviet sailors and Cuban dockers helped to speed up the work. Thanks to such agreements and to labor cooperation with the port workers of Il'ichevsk, Havanna's transportation workers are successfully mastering advanced work methods. Their Soviet friends have sent Cuba equipment models for various cargo operations and regularly exchange information and advanced experience with it. Many of the ships which connect our country with the Island of Freedom leave for their runs ahead of schedule. [Text] [Moscow PRAVDA in Russian 19 Nov 79 p 1] 2959

NEW RAILROAD BRIDGE--The Synya-Usinsk Railroad Line will speed up freight deliveries to our northern construction sites. Yesterday the storming of the last water barrier began on the tract. A bridge across the flooded Sed'ya will become the eleventh large engineering installation on the tract. Construction workers have committed themselves to deliver it this year. The new road will make it possible to do without the traditional Pechora-Usinsk winter trackway. [Text] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 20 Nov 79 p 1] 2959

NEW MOORING LINE--A mooring line has been put into operation in the Zaporosh'ye Port imeni V. I. Lenin for receiving ships of the river-sea type which arrive from Kherson, Feodosiya, Novorossiysk, and also from foreign ports. The republic's maritime gates are constantly growing wider. A new shipping lock is now being built at the Dneproges Dam. The construction workers have committed themselves to put it into operation by the 110th anniversary of the birth of V. I. Lenin. [Text] [Kiev RABOCHAYA GAZETA in Russian 4 Oct 79 p 1] 2959

SHIP-RAISING PONTOON--The Gor'kiy Ship Repair Plant imeni the 25th of October has manufactured the first model of a 100-ton ship-raising pontoon. Its design was developed by specialists from the Volgograd branch of the Gor'kiy Central Designing Bureau of the Ministry of the River

Fleet RSFSR on the initiative of divers from the 7th Expeditionary Detachment of "Podvodrechstroy." The pontoon is intended to conduct maritime vessels through the shallow waters of the Volga-Don Canal imeni V. I. Lenin. Specialists from the Volgograd 7th Expeditionary Detachment have frequently had to help river workers tow these vessels through the canal. They sit very deep, but, as a rule, they are not long. It is necessary to put three pairs of pontoons under every diesel vessel to lift it. However, the pontoons usually extend beyond the hull, hindering towing. And so the Volgograd divers led by the detachment's chief engineer V. Kozlov got the idea of creating the kind of pontoon that would make it possible to conduct large maritime vessels through the canal on two pairs of underwater "shoulders." Nor did they forget about making underwater work convenient. [Text] [Moscow IZVESTIYA in Russian 28 Nov 79 p 6] 2959

NEW DOCK--Klaypeda. A dock with a lifting capacity of 4,500 tons which the shipbuilders of the "Baltii" have built two months ahead of schedule will be able to repair large fishing and trade vessels. This floating ship repair enterprise has been awarded the state Star of Quality. [Text] [Vil'hyus SOVETSKAYA LITVA in Russian 10 Aug 19 p 2] 2959

SHIP ENGINES--The collective of the Khabhrovsk "Dal'dizel'" Plant economizes 600 kilograms of metal with each new ship engine it manufactures. In addition, this engine which was created at the enterprise is much more powerful than the previous model. The collective is responding with deeds to the decree of the CC CPSU and USSR Council of Ministers on improving the managerial mechanism. Since the beginning of the year the plant has saved more than 200 tons of nonferrous metals -- almost twice as much as last year. [Text] [Moscow IZVESTIYA in Russian 16 Sep 79 p 1] 2959

NEW LATVIAN RIVER SHIP--The deisel ship "Boris Pustovoytov" which has been built at the Kiev Shipbuilding and Ship Repair Plant will become the largest cargo ship in the Latvian River Steamship Company. This is the first order which the enterprise has received from another republic and it was filled two weeks ahead of schedule. The new deisel ship is capable of carrying 1500 tons of loose cargo and is outfitted with modern equipment which is used on ships of the "river-sea" type. It has received a high rating from the state certification commission. [Text] [Kiev RABOCHAYA GAZETA in Russian 15 Sep 79 p 4] 2959

ITALIAN BUILT GAS CARRIER--The USSR state flag has been raised on the "Mossovet" gas carrier. The ship was built in Italy on an order from our country and has been turned over to the Latvian Maritime Steamship Company. The steamship company is the only one in our country which possesses a gas carrying fleet. The first gas carriers received their documents in Latvia in the 1960s. There are now eight of them. The "Mossovet" begins a series of gas carriers of a new type. The ship is 235 meters long. It has a speed of 17 knots. Its carrying capacity is 75,000 cubic meters of gas. [Text] [Moscow IZVESTIYA in Russian 27 Sep 79 p 3] 2959

NEW MERCHANT SHIP--The ocean vessel "Aleksandr Osipov" which was built at the plant imeni A. A. Zhdanov was accepted today ahead of schedule by a state commission. The Leningraders have fulfilled an important point of their socialist commitments. The maritime fleet has received ahead of schedule a highly efficient ship with a horizontal cargo working method which is capable of taking on 500 trucks or more than 200 international standard containers. [Text] [Vil'nyus SOVETSKAYA LITVA in Russian 4 Aug 79 p 1] 2959

NEW FISHING TRAWLER--At the Black Sea Shipbuilding Plant workers who are employed in building a large ship factory trawler with an unlimited operating radius are called the Olympic Shipbuilders. In every way the appearance of the ship "Moscow Olympics" will recall the famous sporting event. The windows and the walls of the cabins and dining room will be painted and inlaid by artists with olympic designs. Increased demands have been made upon the operating qualities of the ship. Its freight capacity is 5,670 tons, it is 103 meters long, its surface deck is 10 meters high, and its width is 16 meters. The trawler "Moscow Olympics" is getting ready to come out into the ocean marathon on the eve of the gala opening of the 22nd Olympic games. [Text] [Kiev PRAVDA UKRAINY in Russian 15 Sep 79 p 4] 2959

RAILWAY CONSTRUCTION--The Nakhodka specialized administration No 8 of the Transvzryvprom trust has fulfilled its 4-year and annual plans by completing more than 4 million rubles' worth of work, including laying of the second track from the Nakhodka station to the Uglovaya station. [Vladivostok Domestic Service in Russian 1100 GMT 30 Nov 79]

FAR EAST RAILWAY ELECTRIFICATION--Considerable work is presently being carried out by workers of the tunnels and bridge construction and reconstruction trust of the Far East Railway on preparing the Khabarovsk-Bira section for the forthcoming electrification. Other work being carried out is reconstruction of the Pivan-Sovetskaya Gavan Railway, the final link of the Bam Railway. [Khabarovsk Domestic Service in Russian 0900 GMT 27 Nov 79]

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